

Medical Lib

CLINICAL MEDICINE and SURGERY

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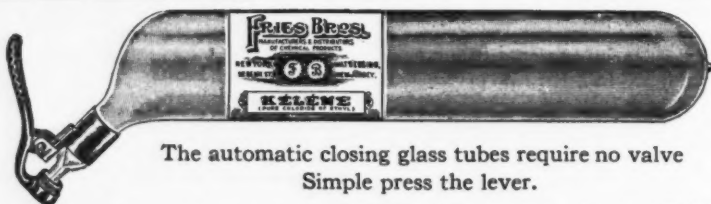
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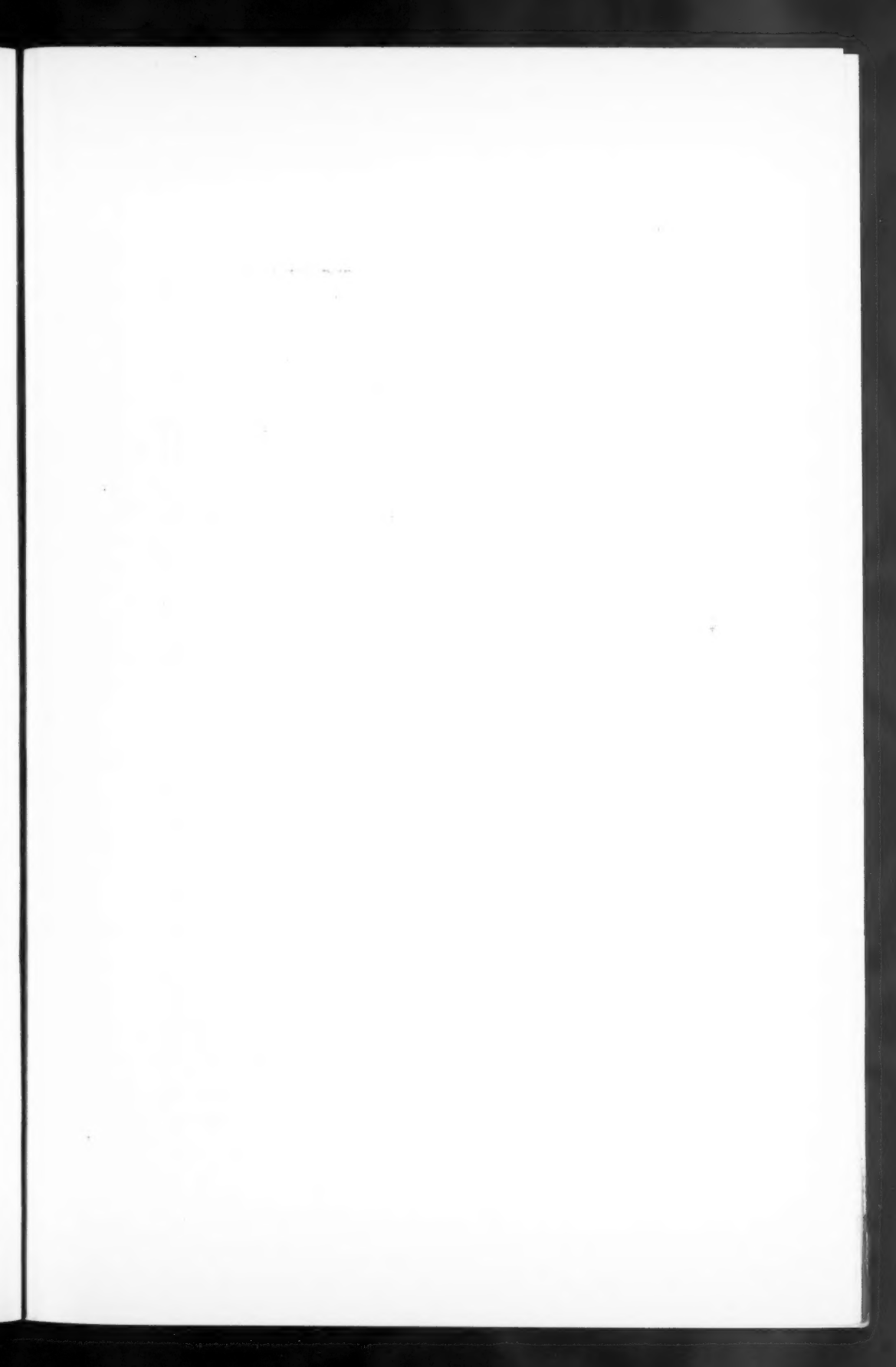
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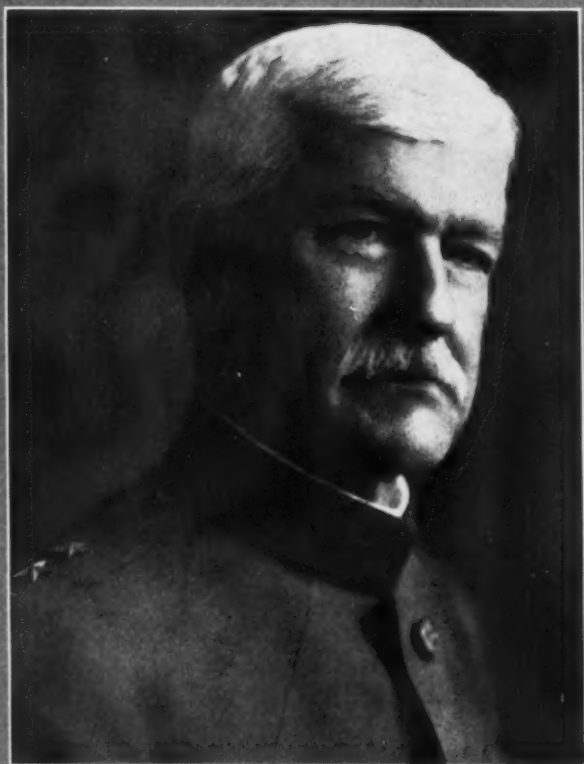
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**MAJ. GEN. WILLIAM CRAWFORD GORGAS, A.B., M.D.,
Sc.D., D.S.M.**



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Dr. William C. Gorgas

JOSIAH Gorgas was a graduate of West Point, back somewhere in the 1840's, and as an officer of the Regular Army, he served honorably in the Mexican War. He married the daughter of a man who was a prominent political figure in the old South, and, while stationed at Mobile, Alabama, on October 3, 1854, a son was born to them and was named William Crawford.

As a boy, William listened to the martial stories of his father and resolved in his childish heart that he would, one day, be a soldier.

The Civil War disrupted many lives, among them those of Josiah Gorgas and his family. Here was one of a number of Army officers (Robert E. Lee was another) who were torn between their duty to the Government and their love and loyalty to the South, and who cast in their lot with the Confederacy. Gorgas, senior, was made a brigadier general and Chief of Ordnance of the Confederate Army; but when the war was over he was a ruined man.

After four years of hardship, during which William was ragged and frequently hungry, his father became head of the University of the South, at Sewanee, Tenn., and the son, in due time, attended that institution and received the degree of A.B., in 1875. He still wanted to be a soldier but, as his father objected to his going to West Point, he entered Bellevue Hospital

Medical College, New York; became a Doctor of Medicine in 1879; and the next year secured an appointment as an officer of the Medical Corps of the Army.

Those were hard days for Army surgeons. Most of the posts were on the frontiers, where medical men were scarce, so that the Army doctors were called upon to attend the sick and suffering for miles around. Young Doctor Gorgas did his share of this work.

In 1882 an epidemic of yellow fever broke out at Fort Brown, Texas, and Gorgas, who was stationed near, was sent to help out. Never having had the disease he soon caught it and was very ill. A girl who was visiting on the post also became infected about the same time, and these two beguiled the tedium of each other's convalescence to such good purpose that they were married a few years later.

It is interesting to consider what a large effect upon his subsequent career was produced by this early attack of yellow fever and the resulting immunity. Wherever yellow fever appeared, Gorgas was sent, because he was not susceptible to this infection. Thus he had an exceptional opportunity to study a disease which was the scourge of the West Indies and all the territory bordering on the Gulf of Mexico.

During the Spanish-American War, he was promoted to be a Major and Brigade

Surgeon, and was placed in charge of the Army Hospital and yellow fever camp at Siboney, Cuba, and after the war was over he was made Chief Sanitary Officer of Havana.

Another Army surgeon working in Cuba, Major Walter Reed, demonstrated, in 1900, that yellow fever is transmitted by mosquitoes, and Gorgas set about the clinical application of this important discovery, as Lister had applied Pasteur's discoveries in bacteriology.

Under Spanish rule in Cuba, anywhere from 50 to 1,000 persons died each year in Havana from yellow fever; in 1896 there were 1,282 deaths. From 1762 until 1901 there had never been a day when this disease was not present in Havana. Gorgas took hold of the situation in March, 1901, and that year there were *just* 5 deaths from "yellow jack." In the past 18 years there has not been a single death in Havana from this cause. This almost unbelievable result has been attained by a concerted and continuous campaign against mosquitoes.

In recognition of this notable accomplishment, Gorgas was made a Colonel and Assistant Surgeon General; and in 1904 he was appointed Chief Sanitary Officer of the Panama Canal, becoming also a member of the Isthmian Canal Commission two years later.

In 1885 Froude wrote of the Isthmus (and the same remarks applied to practically all the Gulf country), "It is a damp, tropical jungle, intensely hot, swarming with mosquitoes, snakes, alligators, scorpions and centipedes; the home of yellow fever, typhus and dysentery."

When the French were trying to build a canal across the Isthmus, out of every thousand persons living there, from 170 to 350 died every year. Such a death toll was an impossible handicap! Under the regime of Gorgas, our death rate was only 17 per thousand. If the old French mortality had continued, 78,000 lives would have been lost in building the canal; as it was, we lost only 6,630 men, all told. Without the sanitary accomplishments of Gorgas there would have been no Panama Canal. In 1914—the year the Canal was opened—the general death rate in the United States was 14.1 per 1,000; in the Canal Zone it was 6!

In 1914, Gorgas was made Surgeon General of the Army, with the rank of Briga-

dier General, and was made a Major General the next year. He held this post during the greater part of the World War, until he was retired for age a few weeks before the signing of the Armistice.

Nor was his work confined to the United States and its possessions. He studied pneumonia in South Africa, typhus in Serbia, yellow fever and malaria in South America, and other problems in other places. The same year that he became Surgeon General, he was appointed permanent director of the International Health Board of the Rockefeller Foundation.

General Gorgas received many official acknowledgments of his work. The Army gave him the Distinguished Service Medal; the Universities of Pennsylvania and of Oxford (England) made him Sc.D.; he received the Harbin Medal in 1920; he was a commander of the Legion of Honor, of France, and the Order of the Crown, of Italy, and, just before his death, which occurred in London, Eng. on July 4, 1920, he was made Commander of the Order of St. Michael and St. George, of England. The British government accorded him a Major General's funeral and he was finally laid at rest in Arlington cemetery, Washington, D. C., where so many of the Nation's heroes sleep.

As the man who had the vision and courage to make practical application of Reed's discovery of the mode of transmission of yellow fever, Gorgas is entitled to the admiration and respect of all humanity. His work as a sanitarian has vastly hastened the progress of civilization.

In person Gorgas was a handsome and upright figure of a man; and all his successes and honors never spoiled him. His friends always called him "Dr. Gorgas," and he loved this title above all others. The poor, hungry, ragged little "rebel" came to be an ornament to his *two* professions and the pride of his countrymen.

During a very busy life I have often been asked, "How did you manage to do it all?" The answer is very simple: it is because I did everything promptly.—Sir Richard Tangye.

HOLING-UP FOR THE WINTER

Bears and various other furry mammals have a habit of "holing-up" when the weather becomes cold and inclement and passing the winter in a state of suspended animation. This is no doubt fine, for

bears, but is it any reason why human beings should emulate our plantigrade brethren of the woods?

We are not talking now, particularly, about the denizens of the remote rural districts, who nail the windows shut on or about Thanksgiving day, caulk the cracks with rags and sew themselves into their "heavies" (though, of course, we ought to be doing all in our power to end such barbarous practices, wherever we find them).

These remarks are directed at the doctors who, though they may have the good sense to play a reasonable amount of golf and tennis during the summer, cease all out-door activities as soon as the snow flies, or limit them to the walk from the house or office to the warmed sedan, and back again.

Those who live in the smaller communities have a chance to shovel snow off the walks, chop wood and do various other prosaic but invigorating "chores" about the place. This helps, but it does not give the psychic "kick" to be obtained from sports. And, moreover, our city brethren are denied even this outlet for their physical activities.

Skating is becoming popular again—at least among the young people; and who of us will admit that he has left that class? Skiing has been introduced from Scandinavia and is delightfully exciting and fine exercise. The woods are wonderful in winter, when the story of the busy lives of the wild things can be read from their tracks in the snow.

Our human intelligence has enabled us to dress in such a way that we can be comfortable in any climate, but few of us use that part of our mental equipment, to any notable extent.

Why not take an afternoon off now and then, to get acquainted with Nature in her sterner moods. She is our grand old mother, even when she treats us a bit roughly.

Why not take a vacation in the winter time, now and then? Not at Palm Beach or some of the fashionable "winter resorts," but in the rough, cold places, where "lounge lizards" would congeal and it takes a man to carry on.

There is merit in these suggestions, and if we would follow some of them a bit we would have less need for a "spring tonic" when the grass begins to grow green again.

IODINE AND THE IODIDES

Iodine (*Iodum*, U.S.P.) is a nonmetallic element, occurring as lustrous purplish-brown masses or scales. It is usually seen in the form of the tincture, which contains 7 percent of iodine.

Until within a comparatively few years, tincture of iodine and other similar preparations have been used solely for their local effect, but more recently the drug is being given internally, in dilutions or combinations which neutralize its severe irritant qualities.

Physiologic Effects: The mechanism of the so-called alterative action of iodine and the iodides is, as yet, unknown.

These drugs are very rapidly absorbed and rapidly eliminated, in practically all of the secretions of the body. There may be enough excreted in the milk of a woman who is taking iodides to cause symptoms of iodism in a nursing infant.

Locally, tincture of iodine is a slowly-acting counter-irritant, when applied to the skin, and has a powerful and destructive effect when applied to mucous membranes. It is painless when applied to the sound skin, but causes severe smarting where the epidermis is broken. If used strong or in large amounts it may cause blistering.

Poisoning—Acute: If tincture of iodine is taken internally, in large doses or undiluted, it gives rise to symptoms of acute *gastroenteritis*—pain, vomiting, purging, etc.—with a strong, metallic taste in the mouth. The pulse becomes rapid and feeble and the face pale; urinary secretion is arrested, by renal irritation; and the patient dies from failure of respiration, with loss of all vital power. In less violent cases, death is delayed for a few days and results from generalized *fatty degeneration* of the organs.

Treatment consists in giving large quantities of starch, followed by evacuation of the stomach; maintenance of body temperature by applying heat; and the hypodermic use of *digitalis*, *atropine* and *strychnine* to stimulate the failing forces.

Iodism is a more mild and chronic form of poisoning with iodine or iodides, occurring frequently as an idiosyncrasy. Its symptoms are various. It may begin as a coryza, with irritation of the eyes and nose, sneezing and serous nasal discharge. There may be mild gastrointestinal symptoms, especially in the morning. The

symptoms may be entirely cutaneous, resembling almost any dermatosis, especially acne; or may involve the nervous system, causing neuralgic pains and muscular twitchings. In rare cases, death has occurred by reason of edema of the glottis, multiple hemorrhages or severe anemia.

Iodine, in all forms, should be given with great care until one is assured that the patient is not susceptible. If symptoms of iodism develop, the administration of the drug should be stopped at once, until all untoward effects subside, and resumed in much smaller doses and with the utmost caution.

Therapeutic Uses: The proper way to counterirritate with iodine, is to apply one heavy painting, and not repeat it until the skin has desquamated and returned to normal. *Never cause pain with iodine.*

The local application of iodine is useful over areas of *pleurisy, pleurodynia, intercostal neuralgia, chronic rheumatism, synovitis and bronchitis, irritative coughs* (paint the supraclavicular spaces), *chilblains*, etc. It exerts an antiseptic and stimulating effect in *ringworm, barber's itch, erysipelas and chronic leg ulcers*; and is valuable in *disinfecting dirty lacerated wounds*, in which case no water should previously be used.

In some cases of *acute coryza*, the fumes of iodine, inhaled from a bottle held in the hand, are helpful.

Where local absorption is desired, *iodine ointment* (there are several excellent proprietary preparations) should be thoroughly rubbed into the skin.

For internal use the tincture of iodine should rarely be used, except in the absence of better preparations, and then very largely diluted with water. Several useful preparations of "soluble iodine" are available and Lugol's solution (iodine and potassium iodide) can readily be prepared.

The oral administration of iodine is now generally accomplished by means of the *iodides* of sodium or potassium (sometimes of ammonium or strontium) or in the form of some of the newer iodine compounds, such as *pepto-iodine*, an organic combination of iodine and peptone which seems to be almost wholly devoid of toxic and irritating properties and contains about 5 percent of pure iodine. It can be given in much larger doses than can the ordinary iodides.

The various iodine preparations have been best and longest known for their value in the treatment of *syphilis*, especially the late, tertiary manifestations. Here these drugs act chiefly as adjuvants to *arsphenamine*, *bismuth* and *mercury*, for they break up and dissolve the fibrotic areas which harbor the *spirochetes* and expose them to the action of the more potent remedies.

In the absence of sodium thiosulphate, the *iodides* are useful in the treatment of chronic poisoning with the heavy metals, but the former drug should be used when available.

In *chronic rheumatoid conditions*—*chronic arthritis, sciatica, lumbago, rheumatic neuralgia, asthma, chronic pericarditis and pleurisy*, etc.—the *iodides* are often helpful; and they are of great value in *hepatic cirrhosis, arteriosclerosis, actinomycosis*, infestations with *animal parasites* (lung and liver flukes, *trichiniasis*, etc.), in the late stages of *pneumonia* (to facilitate absorption of the exudate), and especially in *enlargement of the cervical glands*.

A preparation in which iodine is loosely combined with calcium—known as *calcidin*—is almost specific in practically all forms of *acute respiratory inflammations*, especially if used early and in ample dosage—5 to 10 grains (0.325 to 0.650 Gm.), every 2 to 4 hours, for an adult. It is practically nontoxic and nonirritating and rarely fails to relieve cases of *laryngismus stridulus*, in infants, when given in doses of 1/3 to 1 grain (22 to 65 mgm.) every 15 to 30 minutes, until relief is obtained.

In all forms of *goiter* (except thyroid adenoma, in which it is *contraindicated*), iodine seems to be of value, if administered under the supervision of a competent physician.

In addition to adenomatous goiter, *contraindications* to the use of iodine are found in *pulmonary tuberculosis* (except the very chronic, fibroid variety), *interstitial nephritis, acute gastroenteritis* and any condition where *active destruction of tissue* is going on. It should always be remembered that iodine tends to break up and dissolve fibrotic deposits.

Administration: In giving any preparation of iodine it is advisable to begin with minimum doses and increase gradually, in order to ascertain whether the patient has an idiosyncrasy against it, because doses as small as 3 grains (200 mgm.) of the *iodides* have been known to produce alarm-

ing symptoms. If not, the dose may be pushed to the point of tolerance (sometimes up to 100 to 300 grains—6.6 to 19.8 Gm.—of potassium iodide, daily), or until the desired effects are secured.

The iodides are extremely unpalatable, and when used by mouth should be given in capsules or disguised with syrup of sarsaparilla, fluidextract of licorice or some similar vehicle. The newer preparations are equally effective for this purpose and are much more elegant pharmaceutically.

If tincture of iodine, Lugol's solution or the "soluble iodines" are used in this way, the dose is 5 to 15 drops (0.325 to 1.0 cc.), diluted in a tumblerful of water, three or more times a day.

Intravenous Use: The intravenous administration of iodine, in the form of a 10-percent solution of sodium iodide, is coming into general favor. This method avoids all the disadvantages connected with unpleasant taste and primary gastric irritation and assures prompt and complete results. The usual intravenous use is 10 to 30 grains (0.650 to 2.0 Gm.), in 10 to 30 cc. of solution. Much larger doses can safely be given in this manner, in selected cases, if required.

While the use of iodine and the iodides, for their systemic effects, rests largely upon an empirical basis, at present, they are among our most useful remedies, and few physicians would be willing to forego their use because the laboratory has, so far, been unable fully to explain the reason for their curative action.

Only foolish people think that a thing must be proved perfect in order to be proved good.—Dr. J. Kenelm Reid.

THE TARIFF ON DRUGS

The tariff is such a large and complicated matter that even the experts on the subject are not of one mind on the question as a whole. But there is one part of the tariff business, in connection with which American physicians have had firsthand, personal experience, and that is the tariff on drugs.

We all know that, before the War, a very large part of the medicines we used was made in Europe—chiefly in Germany. We also know what happened when the War cut off our supplies of these essential remedies. Then we saw the United States build up a great drug and chemical indus-

try, so that we were able, not only to supply our own needs, but also to export considerable quantities of these things.

In December, 1927, we spoke, editorially, about the great *cartels*, or trusts which are forming in Europe to dominate the world trade in drugs and chemicals, and pleaded for watchfulness on the part of physicians and pharmacists.

These great foreign drug concerns will surely make an attempt to persuade Congress to reduce the duty on their products, and then they will undersell the American manufacturer and put him out of business. They can afford to sell *at a loss*, for a while, and then, when they have command of the market, they can make it all up, with compounded interest.

We must not let our representatives in Congress go to sleep! We must *tell* them how we feel about this matter, and we must *do it now!*

It is not as if the lowering of the tariff would decrease the price of drugs, for more than a few months, at the most. Then they would go higher than ever. As a matter of fact, our American drug houses have furnished and are furnishing us with reliable medicines at prices considerably lower than we paid for the foreign products.

There are two things that every one of us can do to minimize this danger: We can write to our Senators and Representatives, *today*, and follow up with other letters, from time to time; and we can get in the habit of prescribing and *insisting* upon American-made drugs for our patients.

If we or our pharmacists think we will be doing something clever in buying foreign drugs at reduced prices, so that our profits will be larger, we are due for the surprise of our lives in the not-distant future. We will wake up some morning and find that we have tied ourselves hand and foot and cut our own throats.

The time to deal with dangerous reptiles is before the eggs are hatched; then they have no chance to bite us. These eggs are coming on nicely; and, remember, the incubator is heated with millions of dollars.

If we have no feelings of patriotism and altruism, let us look at this in a purely selfish manner. Give a thought, not merely to next week, but to five or ten years hence, and see where we are going to get off. Having done this, follow the guidance of your consciences and *get busy*.

STETSON HATS AND THINGS

Not long ago a drug salesman called upon a prosperous physician, who looked and dressed the part, and who in the course of the interview remarked, "Why do you charge such high prices for the drugs you sell? I can buy the same things for less."

The salesman glanced about and asked politely, "Pardon me, Doctor, but what kind of a hat do you wear?"

"A Stetson; but what has that to do with it?"

"I wear a Blank and Blank hat, which costs me two dollars. Why do you pay ten dollars for a Stetson?"

"Because I believe it to be the best hat I can buy and am willing to pay the difference to get a satisfactory article."

"You feel sure, then, that, though both of our hats cover our heads and look much the same, at a distance, there really is a difference?"

"Absolutely."

"I sell 'Stetson' drugs, Doctor. Are the other kind good enough for your patients?"

There's something to think about! We get what we pay for, and *no more*. If we want to do a "Blank and Blank" type of business, inferior equipment and drugs may be good enough for *us*. But *are* they good enough for the people who put their lives in our hands? What would they say about it if they knew the facts? What is to prevent the truth from leaking out,

some day? Then, just where will we stand?

The answering of these questions will be a profitable occupation for the next unoccupied half-hour; and upon the way we answer them will depend, to a large extent, where we will stand, professionally and financially, when we take stock of ourselves at the end of the year.

It is *results* our patients want; and we can't do good work with inferior tools, in medicine or any other line of activity.

Of course there are "gougers" who charge unwarrantably high prices for what they have to sell, but it will not take long to discover their methods, and should take even less time to scratch them off our lists.

It might be a truly profitable plan to start the year with a resolve to cease trying to cultivate a modern medical practice, as our progenitors cultivated their fields, with a crooked stick, and to pay enough for our instruments, apparatus and drugs to buy articles which can be depended upon to do the work.

The man who does a "Stetson" type of practice will get the "Stetson" type of people for patients and can well afford to let the "Blank and Blank" folks go to a doctor of their own kind.

That doesn't mean "high-hatting" or overcharging anybody. It merely means; do good work, with good tools, *all the time*, and you will get good fees and plenty of them.

Oriented

In all this Universe of gloom and glory

Where Life is manifest for men to see,

A page, a line in Time's tremendous story,

I am a part of God—and God of me.

G. B. L.

Leading Articles

General Medical Aspects of Certain Diseases of the Skin*

By ISAAC R. PELS, M.D., Baltimore, Maryland.

THE literature of diseases of the skin is almost as old as that of medicine in general. It is sufficient to point to the writings of the first periods of medicine to indicate that cutaneous affections are described abundantly; and although the etiologic factors were necessarily not stressed, we can find that many conditions were supposed to be linked up with changes within the body.

This view has been consistently emphasized by the earlier French school of dermatology; and even today one is impressed by the fact that our Gallic colleagues apparently never lose sight of the possible "arthritic" and diathetic aspects of many of the dermatoses whose cause is still unknown.

It is a striking fact that the modern school of dermatology, instigated so brilliantly by Hebra, who separated himself from his master, Skoda, and applied so diligently the tutelage of Rokitansky, created a genuine pathway to the more intensive study of the skin. There is something of an analogy, however, in this departure from internal medicine, to the confusion which John Hunter evoked, when, by his self-inflicted infection, he held back for nearly one hundred years the identification of gonorrhea and syphilis as separate and distinct diseases. Hebra evidently stressed too much the local conditions of microscopic cutaneous pathology; and while his epoch-making observations on scabies and on the external causes of eczema were brilliant lights in the elucidation of our knowledge, they did not prevent the steady and persistent march of the correlation of cutaneous changes with the many other changes which go on within the body.

Later observers were necessarily forced to seek knowledge by calling upon their general medical training, in addition to

their specific dermatologic knowledge. Consequently the skin came to be looked upon as an organ, in much the same sense that the viscera and other special parts and tissues of the body became of significance; and especially because, like the latter, the skin was known and seen to be influenced and changed by many factors, just as were these other parts.

One of the most illuminating contributions in this regard was made about eight years ago by Engman, in which he discussed the skin as a "mirror to the system." While the skin does not always reflect what is going on within the body, we have learned that the association of skin diseases with internal conditions is so protean and so frequent that we can no longer discard the facts in our attempts at understanding such cutaneous changes.

The present classification of skin diseases is notoriously inadequate and unsatisfactory. Based on morphologic changes since Hebra's period, the influence of bacteriologic, pathologic, immunologic, biochemical and other procedures, has gradually and surely lifted out of the enormous field of unknown etiology, many dermatoses hitherto well established clinically, but now also securely placed in a classification beyond critical breakdown.

And so the tendency has become a natural one to bring better order into the situation; and already we note, in the literature and in some text-books, a very encouraging trend towards this newer and more acceptable arrangement. In other words, the etiologic classification has obtained its foot-hold—if not any too securely, at least with acknowledged faith in its rational outlook.

This discussion of some of the common diseases of the skin in their relationship to internal medicine, will deal briefly with those cutaneous disorders for which a proven etiologic factor has as yet not been found. Attention will be directed to the correlated

*Read before the regular meeting of the Baltimore City Medical Society, Oct. 7, 1927.

conditions, with the hope that it will command a more general attitude of sympathetic understanding on the part of those who, like the dermatologists, are confronted with cutaneous changes which appear without apparent cause.

It is only fair to state that a more comprehensive attitude regarding the causation of these diseases of unknown origin has, as yet, not been rewarded with any striking success. Nevertheless, one can point to a number of cutaneous disorders in which a thorough and searching medical attitude has certainly thrown light regarding changes from the normal. As examples, note herpes zoster, in its correlation to varicella; erythema nodosum, with infection; the tuberculides and lupus erythematosus with frequently found focal tuberculous infection.

Von Recklinghausen's neuro-fibromatosis has been found, recently, to be associated with changes in the bones, as well as with mental deficiencies and with certain endocrine changes, all having some effect on abnormal nerve sheath growth.

Xeroderma pigmentosum—a senile skin of children, much like a roentgen ray or radium mutilation—together with cancerous formation, is apparently a light sensitization phenomenon, the skin and retina being highly reactive to the sun's rays.

Hyperidrosis, associated with vascular changes—chilblains and other disturbances of the sweat glands—is probably an endocrine dysfunction.

Raynaud's disease, with inherent peripheral vascular variations, is linked up, in the light of recent research, with vegetative nervous system control of the arteries.

Pellagra shows a syndrome which includes definite functional changes in the gastrointestinal tract, psychic disturbances and a cutaneous response to sunlight influence, which takes the form of an irritation dermatitis.

Among the more rarely seen diseases are the following: xanthoma, associated with diabetes and with hyperglycemia; xanthoma tuberosum multiplex, with hypercholesterolemia; hydraea aestivale, with hematorporphyrinuria; acanthosis nigricans, with frequent neoplastic changes in the abdominal viscera; general pruritus, with Hodgkin's disease; changes in the nails, with endocrine imbalance; scleroderma, ichthyosis, pityriasis rubra pilaris, atrophoderma and epidermolysis bullosa, with endocrinopathies.

Acne

Acne is a disease of adolescence, appearing at the onset of puberty. The affected individuals exhibit a seborrheic habitus, characterized by an oily skin and comedone and papulo-pustule formation. The frequent resemblance of the patient, both physical and otherwise, to a parent of the opposite sex; the hereditary factor—occurrence of acne in one parent, frequently of the same sex; the exacerbations at menstrual periods, give strong suggestion of endocrine influences in the etiology. This is supported by the fact that acne usually disappears after the second decade.

The gastrointestinal changes found by laboratory tests; constipation; the influence of carbohydrates and sugars in the regular diets in causing exacerbations, formerly attributed as causative agents, are strongly suggestive of a functional origin of the disease.

The pyodermic manifestations are considered by most observers to be frequent complications rather than essential provocative agents.

The acne syndrome is therefore dependent upon numerous factors which, singly or in combination, affect the function of an unstable seborrheal glandular apparatus. If more light were shed upon this dysfunction of the oily glands I believe the etiology of acne would become more clear.

As the bacillary cause of acne, the acne bacillus has not received universal acceptance by the majority of dermatologists. The unquestioned presence of a specific organism has however not been disputed. It is possible that much information will be forthcoming in the future, which will or will not determine the final status of a microbic element in the etiology of this very common disease of the skin.

Rosacea

Rosacea (or acne rosacea) is seen most frequently in women, usually in the 3rd to the 5th decade of life, associated with a seborrheic habitus and frequently with acne.

The underlying disturbance is apparently an ectasia of the smaller blood vessels of the face.

Influenced by food, by beverages, by gastrointestinal conditions, by menstrual and menopausal changes, the eruption varies in intensity and in exacerbations.

The findings are frequently interesting. Abnormal gastric acidity and visceroptosis.

together with endocrinopathy, direct attention to these domains.

Concomitant infection, general and focal, appears to be merely the average expected occurrence; but it must be given adequate attention in any rationale of study.

Herpes Simplex and Herpes Zoster

Evidence is accumulating to convince us that herpes simplex is of microbic causation. Its frequent presence in acute infections and in toxic diseases, including the common cold, would warrant such a conclusion. Frequent occurrences and remissions have been reported in conditions of functional and of neurotic disease, notably menstruation; but these conditions may be precipitating rather than actually causative in nature.

More striking are the associations of herpes zoster, or shingles, with peripheral nerve changes. The involvement of posterior root ganglia probably points to a selective action on the part of a virus or of a bacterial agent, or of both. There are reports also of the affected areas of the skin corresponding to areas of hyperalgesia, these areas representing the skin surface distribution of nerves connected with those of the autonomic system which supply certain viscera. There is thus a hint of visceral disorders expressing changes upon definite areas of the integument, reflexly or by conduction in corresponding segments and in intervertebral ganglia.

Finally, the ever-increasing reports of associated varicella and herpes zoster lend much support to the microbic etiology of shingles; and experimental results are accumulating to substantiate this view.

The neurodermatoses appear to have an ever-growing importance because, more recently, they have become divorced from the indefinite group of chronic, relapsing eczema. The customary onset is characteristic. There are symptoms of intolerable itching in special areas, and the responsive scratching produces the eruption. Thus, frequently brought on by psycho-neurotic attacks, influenced and aggravated by endocrine disorders, especially ovarian dyscrasias, and found by some investigators to have some relationship to food protein sensitivity, one may readily appreciate how closely linked they are with internal changes.

Lichen Planus

Although there is no convincing evidence of the microbic etiology, the findings of

tooth disease, tonsillar and other focal infections, are highly suggestive.

On the other hand, the neurotic and psychoneurotic elements almost link up this disease with those of neurogenic origin. Such symptoms of nervous instability, however, may be part of a vicious circle in which the intense pruritus of the disease in its turn sets up the nervous state.

Viewed from the standpoint of response to therapy—arsenic and other alternatives—there arises the possibility of gastrointestinal disorders being responsible for the skin changes.

In view of many examples of utter lack of response to all kinds of treatment, with a very gradual recession of symptoms, to spontaneous cure, one must incline to the consideration of a temporary, functional, perhaps metabolic disturbance—endocrine, neurogenic or biochemical.

Erythemas of Toxic Origin

Among toxic erythemas we include erythema multiforme, erythema nodosum, the more rarely seen lupus erythematosus and other erythematous rashes for which no cause can definitely be ascertained. Urticaria not produced by food toxins or by split products of digestion may also be included in this group.

Inasmuch as no uniformly present infection or disturbance is found, we are forced to consider this group from a general medical point of view.

It matters not whether infection is met with in the tonsils, teeth, prostate, joints, lungs or other structures, in which various specific organisms, including the tubercle bacillus, are discovered; nor whether other changes occur which are not microbic but supposedly produce toxins, the fact remains that we find the same clinical types of cutaneous changes seen in this group, produced apparently by diverse agents. Ingested drugs and the by-products of faulty digestion may give rise to a general variety of erythematous, papular and urticarial changes.

Organic and functional derangements of the abdominal viscera, for example, have been shown to be intimately associated with cutaneous disturbances. An added factor found in practice is the not infrequent psychoneurotic state which influences the physiologic activity of the viscera and probably accounts for cutaneous reactions. This may also account for the special types of chronic, relapsing urticarias in which

the gastrointestinal changes, according to special investigation, play no part.

Psoriasis

So much has been written concerning the medical aspects of this common disease that merely a summary must suffice for this communication. It is essentially a disease of healthy persons. The Germans have termed it a *Schoenheits Fehler*, or cosmetic blemish.

The gastrointestinal tract, influenced by a high protein intake, has long been accorded a prominent place as an etiologic factor. Supported by the findings, in blood chemistry studies, of a high nitrogen retention, therapy by restriction of the proteins and of *purins* especially has had some successful outcome. Yet exceptions have upset this view. Psoriatics have now and then been vegetarians.

Focal infections, arthritic disturbances, defective renal elimination and endocrine dysfunction are fairly frequent concomitant findings. More recently, the thymus gland has been accorded a prominent place in causing the peculiarly individual changes in the papillary layer of the derma, which are characteristic of the disease. Irradiation of the gland area, including, more recently, the thyroid, has been reported as successful in therapy; but too many failures have prevented us from accepting this as the final verdict in etiology.

Again, the influence of pregnancy in causing exacerbations of the disease is a striking proof of specific endocrine activity, or inactivity.

Exacerbations and sudden onset, associated with nervous and psychoneurotic states, are surely factors of importance; and this view is borne out by the evidently good effects of properly supervised rest, both physical and mental, applied as a therapeutic measure.

Less important, but nevertheless significant, are the effects of photosensitizing agents and of intercurrent febrile diseases, which frequently exert a beneficial influence on the course of the eruption.

The occasional discovery, in the lesions and in the scales, of bodies of a mycotic nature, has suggested a microbic cause. The evidence for heredity and for frequent contagion is supported by too few examples to deserve any importance. Yet the clinical course of the disease suggests, by analogy, that some bacterial, fungous or other type of organism is the cause.

Summed up, the medical changes of frequent occurrence are so protean and of such customary type, that no particular one or particular group of symptoms can with certainty be given credit as a constant etiologic factor.

Psoriasis thus presents itself, for consideration and for treatment, as an internal medical problem, despite brilliant results from local therapeutic efforts.

Pityriasis Rosea

Any recorded facts of general systemic changes in this commonly encountered disease are usually inconstant.

There is an impression, or rather a conviction, that the underlying causes arise in the gastrointestinal tract. This is founded on the history of a poorly balanced diet, with symptoms of an interval constipation, and occasionally recorded mild constitutional symptoms (malaise, lymphadenitis and fever). Roentgenologic studies, blood chemistry estimations and other laboratory procedures have been so unsystematically undertaken that no facts bearing upon the metabolism of the body have been acquired.

The character of the eruption—the frequent “herald spot” or “mother patch”, antedating a characteristic eruption of maculopapules with collar-like scales, resembling a ringworm affection; the self-limited period of duration—about 5 weeks; and the apparent immunity established against recurrences, naturally suggest a microbic cause. In the absence of definite bacteriologic findings, we may look for a possible filterable virus.

It has been suggested, despite the non-contagiousness of the disease, that pityriasis rosea should be included among the acute exanthems; or, if not in this group, then possibly in the larger group of erythemas of toxic origin.

Recently some experimental work has been successful by way of inoculation of serum obtained by blistering the “herald spot” and other lesions of pityriasis rosea. An eruption has been produced, according to reports, which resembles pityriasis rosea fairly closely.

The indications for investigation along purely medical channels are sufficiently clear, from what has been stated, to warrant the hope of finding the cause in the near future.

Lupus Erythematosus

Although lupus is not especially common, its occurrence is important because

of the distressing disfigurement it produces, since the face is usually involved. It was alluded to under the group of erythemas of toxic origin.

The microbic origin is generally accepted; but whether a dormant tuberculous process in glands, lungs and other viscera, bones or joints is always responsible, is not conceded. Other infected tissues and organs, notably the tonsils, have proved to be of frequent association, both in the localized and in the disseminated varieties of the disease. We are confronted then with an embolic process, either of bacteria or of bacterial toxins; and, in view of the conception of actual bacteria causing the tuberculides, we cannot readily repudiate the facts. Less important, but highly suggestive of other agents, is the response of the skin to photosensitizing agents—the exacerbations of the disease frequently seen following exposure to wind and to sun.

Successful treatment with **gold-sodium thiosulphate** has been extremely encouraging. It suggests most pertinently a microbic agent as the cause.

Alopecia Areata

Although the etiology of alopecia areata is still as unknown as it was 50 years ago, certain facts have come to light from recent studies.

The microbic origin of the suddenly appearing bald patches is suggested by analogy to the alopecia occurring in syphilitic infection without demonstrable organisms. Tonsillar infection has been reported as of frequent occurrence.

Again, a preceding psychoneurosis, fear, injury to bones, and an apparently selective involvement of certain nerves supplying the scalp, warrant in some measure a conception of trophic disturbance, combined, also, with endocrine changes in patients otherwise healthy; and the fact that most cases of this disorder become well spontaneously indicates a possible metabolic, functional change, the nature of which can be determined only by more intensive medical investigation.

Eczema

The manifestations of eczema, the most common of skin diseases, are so protean that discussion will be limited to that group where the inciting causes and the precipitating factors are indefinite. This, naturally, will include an increasingly large number of conditions where the precipitating agents are definite, but where, as in

poison oak and ivy dermatitis, the individual inciting cause is, as yet, not known.

We may thus consider eczema a pathologic state of the body, with reference to the skin, produced by at least two factors; a sensitizing one and a precipitating one. The cutaneous manifestations arise from the interplay of internal conditions and external irritating agents. The latter are manifold and, we believe, innocuous, were it not for the state of sensitization present. Specificity of attack probably does not occur; we believe rather that any one of a number of factors—chemical, physical, etc.—may produce one and the same cutaneous reaction; namely, eczema.

It thus remains for our purpose to summarize some of the internal conditions which, in the light of recent research, have been proved by clinical and by experimental evidence to justify this designation:

1.—Gastrointestinal toxemias produced by specific (sensitizing) foods or by generally poorly balanced diets. This included constipation, hepatic and pancreatic dysfunctions. Examples are infantile eczema, diabetic and so-called gouty eczema. The last two conditions are more frequently written about than actually met with in practice. This apparent discrepancy is probably due to incomplete investigation on the part of the physician. It indicates quite definitely, however, the importance of a thorough medical survey of every case of this type.

2.—Disorders in the integrity of the glands of internal secretion, individually or in groups. These disorders may be considered as having an influence on the physiology of the various viscera and also upon the skin, either directly or by reflex channels.

Examples are: The pruritus and eruption in menstrual and in menopausal states; the pruritus associated with diabetes; and the tendency to itching and eruption concomitant with simple goiter.

3.—Antecedent respiratory tract infections and affections, especially asthma, which apparently induce a condition of high sensitivity—indeed, an allergic state.

As in group 2, the skin, either generally or in portions, becomes hyperesthetic (most frequently pruritic), and traumatism of various degrees and kinds readily produces an eruption—a typical eczema.

4.—Renal aberrations, according to the French school, are more frequent than is

generally admitted. The pathologic changes induce conditions which exert an influence through the blood stream on the skin, probably in much the same manner as we suspect in the foregoing group.

Sufficient facts have been stated to indicate where the beacon lights of investigation shed their rays. Though the last words in cutaneous pathology have almost been written, there still remains a vast field for research in bacteriology, serology, physical chemistry and in biochemistry.

We must inevitably return through the door from which Hebra emerged seventy-five years ago, but with the experience gained by expert dermatologic cultivation. To this must be added the knowledge acquired through general medical progress. The results should justify our extravagant hopes for solving the unknown facts concerning many of the common diseases of the skin.

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The Significance of Chronic Pharyngitis

By W. E. DEEKS, M.D., New York, N.Y.

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THERE is probably no single pathologic condition more frequently observed by the clinician than chronic pharyngitis, and its etiologic significance is generally not appreciated. The following discussion does not pertain to those types of inflammation or ulceration of pharyngeal structures due to specific organisms, such as *Bacillus tuberculosis*, *Treponema pallidum*, *Bacillus leprae*, *Streptococcus*, etc., but applies only to those types which are generally free from marked subjective symptoms.

Sir St. Clair Thomson defines chronic pharyngitis as "a chronic affection characterized by alteration in the mucous membrane of the pharynx. It particularly involves the muciparous glands, and the lymph-follicles may also be affected." Under this heading, he includes: (a) simple chronic catarrhal pharyngitis; (b) chronic granular pharyngitis; and (c) lateral or hypertrophic pharyngitis, as well as the condition known as "clergyman's sore throat."

He considers the causes as "obscure, remote, and various," and includes among them chronic affections of the teeth, mouth, and tonsils, as well as the extension of inflammation from contiguous structures, such as the nasal mucous membrane.

He further states that "measles and scarlatina are often charged with leaving chronic pharyngeal catarrh in their wake," and mentions that, among other exciting or predisposing disorders, are chlorosis, anemia, dyspepsia, constipation, gout, rheumatism, plethora, congestion or cirrhosis of the liver, diabetes, cardiac affections, chronic bronchitis, emphysema, asthma and tuberculosis. As contributory causes, he

also incriminates the use of tobacco and alcohol, as well as improper voice-production.

The structures involved in a chronic pharyngitis are the tonsils, the mucous membranes and submucosa of the pharyngeal wall, pillars of the fauces and uvula.

The writer of this article does not believe that the use of tobacco is responsible for this condition, as any inflammatory process due to smoking involves also the mucous membrane anterior to the pillars of the fauces.

Symptoms

These may be absent or give rise only to the vaguest discomfort or soreness, aching, or the sensation of the presence of a foreign body. There may be a frequent desire to swallow, and this action is sometimes associated with a dry, rasping or painful sensation. A hacking, ineffectual cough associated, with mucous expectoration, may be present. Severe pain is rare. If the inflammatory process involves the structures of the larynx, recurring hoarseness is common; and if the eustachian tubes are involved there is a tendency to deafness.

On inspection, the pharyngeal wall, tonsils, pillars of the fauces and uvula are congested or inflamed in varying degrees of intensity, even to that of a raw-beefy redness. In the more chronic types, tissue hypertrophy and granulations on the posterior wall are commonly present; where there is great chronicity there is atrophy of the tissues involved; and the mucous membrane has a dry glistening appearance often with the clinging mucus, which induces coughing or hacking and is difficult

to dislodge. If general anemia is present, the inflammatory redness of the throat is far less striking.

The question naturally arises, therefore, as to the nature of the etiologic factor, if any, which is common to chronic pharyngitis and the diverse pathologic conditions described, which should include, in addition, many other syndromes usually considered as disorders of metabolism, such as arteriosclerosis, calculi formation, skin eruptions, etc. A solution of this problem would throw considerable light on the predisposing and exciting factors of a large number of morbid conditions.

The pharynx is the upper expanded portion of the alimentary tract and is in direct anatomic continuity with the esophagus and the stomach. The stomach must be considered as a sac which retains the food during the processes of digestion, for a prolonged but variable period of time (which depends largely upon the character and quantity of the food intake), during which time its contents undergo certain changes. With a diet properly balanced in its protein, carbohydrate and fat contents and in the acidity and alkalinity of its inorganic salts, and containing adequate amounts of vitamins, the physiologic and chemical changes which take place in the stomach should not give rise to subjective symptoms nor to local or systemic pathologic manifestations. If, however, the food intake is unbalanced and consists of excessive amounts of certain of these classes of foods and inadequate amounts of others, sooner or later morbid conditions follow.

Unbalanced Diets

If the food intake of the majority of the people in this country at the present time is considered, it will be found to contain an excessive amount of carbohydrates in the form of bread, potatoes, cake, pastries, sweet desserts and drinks, etc., and an inadequate amount of green and root vegetables and fresh fruits. This is especially true during the winter season. As a nation, we consume proteins and fats in sufficient, if not in excess amounts for physiologic requirements. There is a national tendency, however, to eat excessive amounts of the carbohydrate group of foods because of their accessibility, low cost and pleasing taste and appearance. As a group, they are prone to be attacked by the bacteria of fermentation, in the stomach and intestines, and this is particularly true of the sac-

charine contents present in artificially sweetened foods. The resulting products of fermentation are gas and absorbable toxic substances, generally in the form of irritating organic acids. The nature of these depends on the class of bacteria involved and the substances acted upon.

We must consider foods not only from the standpoints of their protein, fat, and carbohydrate contents, but in other terms as well; particularly as to the acid, alkaline or neutral characters of their ash, and the types and amounts of vitamins present. Hutchison tabulates examples of the main groups of foods differentiated by the chemical reaction of the ash as follows:

Acid Foods	Neutral	Alkaline
Oats	Sugar	Carrot
Barley	Vegetable Oils	Turnip
Beef	Animal fats	Potato
Wheat		Onion
Eggs		Milk
Rice		Blood
Maize		Peas
		Lemon juice
		Orange juice
		Beans

It is to be noted that, with the exception of milk, practically all foods from animal sources, as well as all cereal foods and their derivatives, have an acid ash; and that these constitute the bulk of the food which is generally consumed.

The alkalinity of the blood must be preserved, if we are to prevent morbid conditions and pathologic processes. In consequence, a generous amount of the alkaline group of foods must be ingested. In addition to the chemical reactions of foodstuffs, the vitamin contents are of tremendous importance, as recent work has shown that their absence or deficiency in foods brings about morbid conditions and pathologic changes of far-reaching importance.

If we consider the representative foods from the standpoint of their vitamin value, we find that animal foods, in the form of meat and fish, are practically devoid of these substances; that in cereal grains they are present almost entirely in the germ and the bran, which are practically all removed during the processes of milling in order to improve the appearance and keeping qualities; that in sugars and all vegetable oils there are practically no vitamins; and that these are to be found, in sufficient quantities for our physiologic requirements, practically only in the alkaline foodstuffs, such as milk, the

legumes, root vegetables, leafy green vegetables, and fresh fruits. A properly balanced diet, therefore, must contain a large proportion of these alkaline foods. A diet largely or exclusively confined to meats, cereal foods, and sweet desserts, sooner or later will provoke morbid conditions, local and systemic.

Pharyngitis and Excess of Sugars

That a relationship exists between chronic pharyngitis and an excess intake of the fermentable carbohydrate group of foods is demonstrated by the fact that such a condition does not exist in people living on a well-balanced diet; and that, when present, it gradually disappears after the absolute discontinuance of artificially sweetened foods and drinks; the restriction of the acid ash carbohydrate foods; and their replacement by green vegetables and fresh fruits. The improvement is marked in from two to three weeks and the inflammatory condition gradually subsides.

Sir St. Clair Thomson recognizes a distinct clinical relationship between chronic pharyngitis and the series of clinical syndromes referred to, but does not suggest its nature.

For many years, the writer has inveighed against the excessive use of carbohydrates in the form of cereals, cereal derivatives and artificially sweetened foods, in the belief that they were a predisposing and, in some conditions, an exciting cause of, not only the conditions observed by Sir St. Clair Thomson, but of many other symptom-complexes as well, notably arteriosclerosis, chronic nephritis, calculi, pellagra, sprue, retino-choroiditis, iritis, dysmenorrhea, eczema, acne, enuresis in children, tooth decay, cancerous conditions, etc. As a matter of fact, most of the organic affections and tissue degenerations from which humanity suffers, with the exception of those due to specific organisms, give a history of an unbalanced diet, in which refined and fermentable carbohydrate foods are consumed in excess of physiologic requirements. The excess of these forms of carbohydrates is usually associated with a deficient intake of the alkaline-ash and vitamin-producing foods, such as root and green vegetables and

fresh fruits. Clinical observation demonstrates that chronic pharyngitis is practically always associated with these eticologic factors. Any treatment, therefore, which will relieve chronic pharyngitis, should have a beneficial effect on associated clinical syndromes, such as those referred to, and this proves to be the case.

In chronic pharyngitis and associated morbid conditions, a diet should be planned to furnish sufficient proteins and fats to meet physiologic requirements. Carbohydrates, should be provided: (a) in the form of cereals and their derivatives—preferably those not excessively milled and not exceeding in quantity 6 ounces daily; and (b) the remainder necessary to supply the requisite calories in the form of root and leafy green vegetables, and fresh fruits. Artificially sweetened foods should be avoided entirely or used in very limited quantities. This system of dietetic treatment is followed by a gratifying improvement, not only of the chronic pharyngitis, but of many associated conditions.

If more attention were given to the food intake, along the lines suggested, fewer tonsillectomies and throat treatments would be indicated.

Conclusion

When the physician observes the presence of chronic pharyngitis, not definitely attributable to a specific infection, he should realize that his patient is probably living on an unbalanced diet. By influencing his patient to correct this dietetic defect he will not only relieve the chronic pharyngitis, but also anticipate and prevent the development of systemic tissue and organic degenerations and secondary bacterial invasions, which are prone to follow after a variable period of time.

The character of the pathologic condition, occasioned by an unbalanced diet, depends on the inherited characteristics of the individual, environmental influences, and secondary bacterial invasions.

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A Visit with Professor Davide Giordano at Venice*

By MAX THOREK, M.D., Chicago, Illinois

Surgeon-in-Chief, The American Hospital.

I HAD made up my mind that, during my last visit to Europe, in August this year, I would not visit hospitals and doctors, or bother about anything pertaining to medicine. I was tired and needed a rest. After nearly a quarter of a century of arduous labor in the surgical harness one *does* need a rest.

We arrived in Venice on a beautiful August morning. True to my resolve, I jumped into a gondola and was off for Lido to loaf on the sands of the Adriatic shore, to meditate, to reminisce and to think. I adhered to my resolution for the first few days. However, one morning, arising at six and ready to don pyjamas for a stroll on the shore, an admonishing voice somewhere in my subconscious spheres obtruded itself with, "What! You here within fifteen minutes of the great Giordano's workshop, missing the work of his nimble fingers, forgetting his stimulus, his inspirations, and you not even visiting him? Shame on you!"

What a silly urge, I argued with my invisible ego, I am here to rest and not to visit clinics or medical celebrities. However, the urge spoke persistently again and again, more emphatically, more temptingly, and let me confess that less than a quarter of an hour passed before that very same urge of my subconscious self got a hammer-lock and half Nelson on me, and a few moments later I rudely yanked Philip, my son, out of a peaceful slumber and we were soon on the steamer on our way to the

Ospedale Civile in Venice, all resolutions being cast to the four winds.

This hospital, built in the Thirteenth Century, opened, in those distant days, so a tablet informs us, to four charity patients, and now houses about 1,500 to 2,000 patients! What a thrill as I ascended the old stairway! My heart was palpitating before I reached the sixth floor, where Giordano's operating suite is located, not due so much to the brisk ascent of the stairway as to the thought of being face

to face with the great master in a few moments.

We arrived in the operating room promptly at seven o'clock. There he was before us, as usual, stalwart, radiant, with a benign smile upon his patriarchal face as he ejaculated, "Thorek! You here? I am delighted to see you." For the moment nothing else was said. The sisters slipped gowns on both Philip and me and we approached the operating table.

Brilliant Technic

Giordano was performing a gastroenterostomy. The stomach had just been delivered, an *ulcus duodeni* located, and with a, "We shall do a posterior gastro-jejuno-stomy" he proceeded.

I was amazed! One suture was used in the entire operation and that of catgut alone! He approximated the serosa of the stomach to the jejunal serosa; returned the same stitch to the starting point, grasping in it the serosa and muscularis. A stoma was now made in both stomach and jejunum. Next, returning, with the same stitch, he united all the divided structures of the



Prof. Davide Giordano

*Read at the meeting of the Staff of the American Hospital, Chicago, October 25, 1927.



Prof. Giordano at Work

stomach and jejunum posteriorly and anteriorly. With a return suture, with the same ligature he again united serosa-muscularis to serosa-muscularis, and finally serosa to serosa. Here you have the whole operation in a nutshell and, again I say, it was done *with one suture of catgut!*

I wondered. I pondered, "Is he not afraid that the catgut will give way? Is he not somewhat belittling the dangers of a one-suture technic?" But when I asked him about this, later, he whispered to me, "It is a simple operation; it is fine, it gives no trouble." The beginner—even the advanced surgeon—would hesitate before doing what Giordano is doing, but *he* is Giordano—Giordano the scientist, Giordano the master! *Experientia docet!*

A few minutes later the next patient was brought in. This was a case of resection of the sigmoid for carcinoma. The operation was accomplished just as simply, just as elegantly as the preceding one, and also with one suture. This was an end to end anastomosis. The carcinoma was a large one and complicated by suppurative perisigmoiditis.

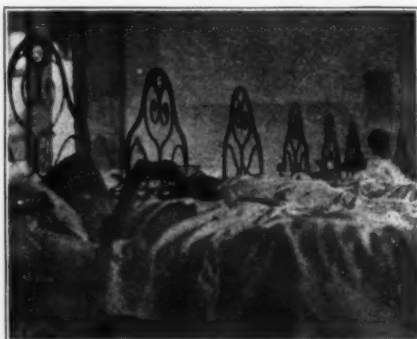
This was followed by two cholecystectomies. While doing the second one he



(Courtesy of Dr. Ligorio)
Type of Uniforms Worn by the Sisters at the
Ospedale Civile, Venice

turned to me and said, "Do you drain your cholecystectomies?" I answered in the affirmative. "Good," said he; "there has been, recently, a tendency to close the abdomen after cholecystectomy. This is not fair to the patient. It cannot be foreseen when a slight leakage of some infectious material may cost the patient's life."

The next patient to be wheeled in was a woman in whose case the differential diagnosis rested between chronic appendicitis and some pathologic condition about the right ureter. Giordano explored the ureter through a lumbar incision, and then, through the same incision, opened the parietal peritoneum, delivered the cecum, removed the appendix and explored the adjacent viscera. This piece of surgery



A View of One of the Surgical Wards at the
Ospedale Civile, Venice

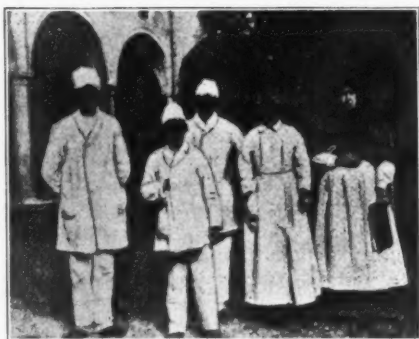
cannot be described. Its brilliance must be seen to be appreciated.

And so it went all the morning, and a number of other mornings on which I broke my resolution and traveled to the shrine of this great master to see, ponder and learn.

Operating-Room Arrangements

Our savant is aided by his first assistant. No nurses are seen in the operating room. Sisters are in attendance. A physician whose sole function is the threading of the needles and supplying the proper suture material during the progress of the operation, is stationed to the right of the operator. The instruments are handled by the first assistant. Ether anesthesia, by the drop method, is the rule.

Giordano does all the operating himself, from the primary incision to the tying of the last knot. His wound sutures—peritoneum, muscle, fascia, etc.—are all inter-



(Courtesy of Dr. Ligorio)

Attire of Patients at Ospedale Civile, Venice

rupted. No continuous suture was seen by me during my recent visit. Occasionally he will permit his first assistant to perform an operation, and he does it well. Some mornings demonstrations to students were given. Surgical diagnoses were made; differential diagnoses dwelt upon. Not a dull moment while we were there. A versatile fountain of information awaits one who visits him.

Giordano has not changed much since I saw him four years ago. He is beloved and revered by all who know him. He is typically Latin in temperament. When something displeases him in the operating room he sometimes displays anger in no indefinite terms. Silence and tension reign during these moments. One could hear a pin drop. The uninitiated would think the world was coming to an end, but his assistants are not awestricken and not in the least perturbed. They smile, for they know his roars are the benignant admonitions of a fatherly, yet keenly sensitive master who has the interest of his patients at heart and the welfare of his assistants uppermost in his mind. It is simply a question of rigid discipline.

Giordano wears rubber boots in the operating room and his gloves are of a thickness that is used in our country by pathologists. His tactile sense must be, and evidently is, a marvel of precision and finest delicacy, for it is only the highly trained who could palpate and differentiate structures through those thick gloves, as he does, with such obvious facility. He wears no eye-glasses during the most delicate manipulations.

Perhaps you will be interested to know something about the man and his accom-

plishments, so permit me to digress here for a moment and give you just a partial glimpse into his *curriculum vitae*.

Giordano Himself

Professor Giordano was born on March 22, 1864, at Courmayeur, the son of a school principal. His father is still living and enjoys the very best of health.

Young Giordano graduated at the University of Turin, and then became a beloved pupil of Professor Novaro, who was considered the greatest Italian surgeon of his time, in the antiseptic era. He also received preliminary training under the dean of Italian scientists, the eminent parasitologist, Professor Eduardo Perroncito, under whom he has done research work on septicemia, tetanus, etc., and completed his studies, with a thesis on acute osteomyelitis, for his doctor's degree, in 1887.

After having been director of the Hospital de Torre Pellice, in Bologna, he was recalled by his master, Professor Novaro, to direct his laboratory of clinical surgery at the University of Bologna. In that capacity he distinguished himself to the highest degree.

At that time a competitive examination was announced for the chief surgeonship of the Civil Hospital of Venice (1894). It is well known that this examination is one of the severest tests for that position. Among



Prof. Davide Giordano and the Author at the Ospedale Civile, Venice

thirteen contestants he won first place. Here we find Giordano in his glory. In the hospital which, up to this time, had been used only for the purpose of taking care of patients, the tireless Giordano created, in 1896, an intensive course of training for young surgeons and inaugurated post-graduate courses for older aspirants to surgical accomplishment. His ambition to diffuse knowledge to younger men finds no bounds. His enthusiasm has no limit.

In passing, let me cite the expression of an eminent American surgeon, during the time of the meeting of the Society of Clinical Surgery, who says that Giordano reminded him most strongly of George Owen, the famous English surgeon, who was born in Worcester, England, in the Fifteenth Century, was physician to Henry's Queen, and is credited with having done a cesarean section on Jane Seymour, mother of Edward VI. Later he became the president of the College of Physicians. I took pains to look up the resemblance between George Owen and Davide Giordano. It is striking, but Giordano towers over Owen in accomplishments and marvelous versatility.

Professional Contributions

To tell you here of the numerous publications of Professor Giordano would be futile. The list would fill a respectable sized volume. But let me give you just some highlights on this remarkable man's diversified labors. He published a book of "Lectures to the Younger Surgeons;" this was followed by a textbook on "The History of Surgery of Italian Surgeons," soon to be followed by a volume of "Surgery on the Kidney," and the "Results of Scientific Conferences Among the Medical Officers of the War."

Giordano is not a man with a "one track mind." Among the variegated subjects we

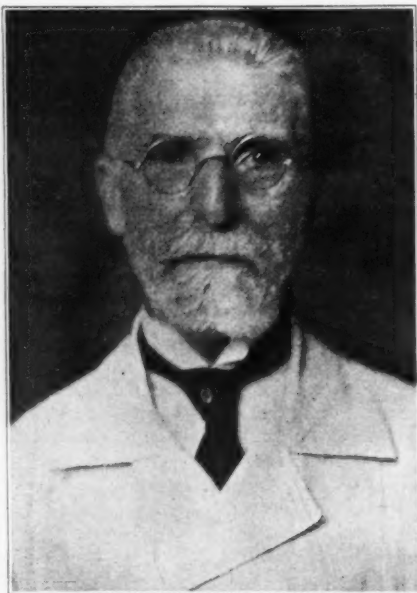
find him perfecting an operation for removal of the hypophysis by the glabellonasal route; perfecting a method of arthrectomy of the hip joint (known by his name); the abdominal removal of the rectum; the perfecting of a nephropexy operation; removing the appendix and gall-bladder through a lumbar incision; a variegated number of technical essays dealing with the surgical treatment of nephritis and colitis; a new method of suspension of the spleen; and other labors too numerous to mention. I counted about 200 contributions to medical literature.

Extraprofessional Labors

During those stressful years of the World War he was made consultant of the Ospedale Civile, Venice, and chief of the auxiliary service at the front; and when the troubled days of 1920 found Italy on the brink of ruin and menaced by radicalism with probable utter destruction, we find Giordano, the valiant fighter, in the midst of political conflicts, with the result that he became mayor of the beautiful city of Venice and carried on that work for four years. It is not

a small job even for a big man to carry the civic burden of a large city, with its ramifying duties and responsibilities. He did it and did not neglect, at the same time, his professional duties, not missing a single day in operative work in the hospital and administrative labor at the City Hall. In 1924 he became Senator of the Kingdom. This position he still retains.

On my visit during August I found him the same dynamo as of old, directing the surgical destinies of his large hospital and doing justice to his duties as Royal Commissioner of the University of Higher Sciences and Economics, as well as functioning as a very active President of the Commission of the Museum of Natural His-



Doctor Eduardo Ligorio, Medical Director of the Ospedale Civile, Venice

tory. Besides this, he is a member of an inexhaustible number of medical, surgical and historical societies. Last year he was President of the International Congress of Surgery, held at Rome. Our own country was also represented on that occasion.

Other countries, notably Roumania, Belgium, France, Switzerland, Spain, Portugal, Hungary, Czecho-Slovakia, and others, recognize his genius and shower him with honors in the form of distinctions and decorations of various sorts.

I envy him, as you would. The life he leads is ideal. He lives in a palace, one side of which overlooks the Grand Canal, while the other leads into a beautiful tropical garden. In that garden he cultivates divers tropical fruits and belabors the soil with his own nimble hands. At tea, to which my family and I were honored by being invited, we were entertained by him and his charming wife, an esthetic, cultured lady of utmost refinement, and his accomplished daughters. Among those present was the distinguished Professor Eduardo Perroncito, who discovered the *Ankylostoma duodenale*. He is the master of parasitology of Italy and a most delightful gentleman.

After tea we visited the library of Professor Giordano, where we were privileged to delight in rare volumes of medieval medicine and surgery. We reveled in modern and semimodern tomes, all labelled, classified and placed in proper position by our great host.

I observed that while one roams through this atmosphere of art, culture and refinement one must never say that he admires some special thing, for a moment later he will be the embarrassed but proud possessor of the object of his admiration. I happened to express delight in a volume of surgery written by an author of the Fifteenth Century (*Chirurgia Magna*, Lanfranci, 1480), and in a flash Giordano autographed it and insisted that I accept this rare book.

And so it went, day after day, one delight after another. My resolutions were broken, to be sure, but I benefited greatly, and so will you if you make a pilgrimage to Italy and find Giordano in Venice. It is wise to pay homage at this font of learning and shrine of profound surgical wisdom.

You will find, at the Ospedale Civile, Professor Ligorio, the superintendent of that great institution, a courteous and learned gentleman, conversant with every phase of medical and surgical administration of hospitals, and the author of a recent volume on this subject.

When Giordano bade me goodbye, and while his warm and masculine handclasp lingered in mine, his countenance beamed with that characteristic smile of his as he softly said in perfect English, "Come again soon, and remember me to my friends in America. I wish them all well."

I was moved. I could only reply in his own sentiment, "We also wish you well, and may you continue as you are *ad multos annos*."

850 Irving Park Blvd.

Artificial Leukocytosis After Injecting a Protein and Mercury Succinimide

By BURR FERGUSON, M.D., Birmingham, Alabama

CLINICAL observations in the treatment of a great number and variety of infections, during the past twelve years, by means of intravenous or intramuscular injections of the several most used arsenical and mercurial preparations, these agents having the common power of stimulating the production of the white blood cells, inevitably lead to the conclusion that these little bodies play an important part in resistance to the invasion of harmful organisms, the demolition of pathologic tissue and the repair of wounds. These phenomena having been seen in so great

a number of infections, I am convinced that the recovery from any pathologic condition is necessarily accompanied by a natural or artificially induced increase in the numbers of the white blood cells.

The principle controlling the treatment of the syphilitic infection has seen no change for several hundred years. Empirical observations have resulted in many changes in the administration of the several metals used, but always with a view of increasing the sterilizing power of the agent given, these developments having established the present day practice of

•ternate injections of arsphenamine, bismuth and mercury, in series of treatments.

It is a demonstrable fact that the old practice of giving mercury by inunctions has a marked influence on the production of the white blood cells, but this increase is not nearly so great nor is it so well maintained as that seen after the intravenous administration of metaphen or mercurochrome, or the intramuscular injection of mercury salicylate or bismuth. Would not this fact very logically explain the much more rapid disappearance of most manifestations of the luetic infection, under the intravenous or intramuscular injection of the arsenical and mercurial preparations, than under the treatment formerly used of mercury by inunctions and by its oral administration?

Injections of Lactigen

Early in August it was determined, by the writer and Dr. B. C. Gillen, to prove or disprove the theory of cellular resistance to the syphilitic infection, in the treatment of 25 cases showing the initial lesion, by the use of the protein reaction, this being a very direct stimulant of the production of an artificial leukocytosis. We were both much stimulated by the prospect of making these determinations, as we were told by several associates that arsenic and mercury could not be supplanted and that milk had no influence over the white cells.

On the 12th of August, 1927, our negro orderly in the clinic was used as a control. The white count was 5100 per cubic millimeter. He was given 10 cc. of lactigen, intramuscularly, and seventeen hours thereafter the white count was 15,900 per cmm.

During the following week, 20 cases showing lesions on the prepuce or glans and appearing at the clinic for the first time had counts in the laboratory of the Hillman Hospital, through the kindness of Dr. B. S. Graham. A few of these cases seemed to be clearly syphilitic infections, but the greater number were mixed infections, some apparently chancroidal. After the counts, each of these patients was given 10 cc. of lactigen and each was asked to return the following day for the second count. Of the 20 cases, 16 did report to the laboratory, and in each of these a marked increase in the white cells was found, the smallest increase being from 5,200 to 11,800 and the largest from 9,600 to 23,000 per cmm.

The clinical effect was about what is seen in the same lesions after the use of arsphenamine, the greater number of the cases showing a marked improvement on the second visit, two days after the injection of the lactigen—such changes for the better as warranted the second injection of the protein. It was found that, with the small lesions of either or both infections, 5 or 6 injections, at two- or three-day intervals, were necessary for healing. In the older and larger lesions, such progress in healing, after this number of injections, was made as to convince Gillen and me of its efficacy in the repair. Then, on account of the expense and the frequent visits, these patients were put on the routine treatment of arsphenamine and bismuth.

After seeing the satisfactory results with the lesions, within a short time after their appearance, under the influence of the artificial leukocytosis, it seemed logical that a beneficial influence might be shown in syphilitic infections a bit further advanced. So the first case appearing thereafter, with a chancre, rash and mucous patches in the throat, was given 10 cc. of lactigen, after a white cell count of 8,000 per cmm. Twenty-four hours thereafter, the count was 14,600 per cmm. Forty-eight hours after the injection the rash was paler, mucous patches smaller and a small chancre healing nicely. Three days after the third injection of lactigen the rash was very faint, throat in good condition and the chancre was noticeably improved—sufficient improvement to convince Gillen and me that the white cells, stimulated by a protein, seemed to have all of the powers over the syphilitic infection which are so generally seen under the artificial leukocytosis produced by arsenic or mercury.

With the consistency of the results being seen every day, came an increasing confidence in the value of the protein reaction in this infection, so it was determined to try the effect of this idea on a case in which the usual plan of treatment was apparently of no use. This was a negro whom we saw first on the 16th of June, 1927. There were several lesions on the prepuce, which was so swollen that retraction for further observation was impossible. The Wassermann test was positive.

With much assurance the patient was told that he would be decidedly better on his next visit, as 0.6 Gm. of arsphenamine was being injected intravenously. On this

visit, instead of the expected improvement, he was worse, the penis being larger and rather more painful. Believing that perhaps he was not sensitive to arsenic, but that he surely would be to mercurochrome, he was given 15 cc. of a 1-percent solution of this agent, with more assurances of the changes for the better that he would see and feel during the next few days.

On the next visit, four days thereafter, he reported the usual symptoms and conditions following the powerful reaction of mercurochrome, and after this was over he did feel better, but, unfortunately, there was no improvement in or about the site of the lesion.

During the next few weeks he had 8 cc. of mercurosol and four injections, intravenously, of a 1-percent solution of tartar emetic, with no change in the lesion, it being still impossible to retract the foreskin. The only benefit that Gillen or I could see from two months' treatment was that the lesions had grown no larger.

When he called at the clinic on the 19th of August, there had been one week of observation of the very potent effect of the artificial leukocytosis following the injection of lactigen, and here at hand was an opportunity to observe the effect of the protein reaction, in a case in which the routine treatment of such infections was a failure.

The white cell count was 7,700 per cubic millimeter before the injection. Twenty-four hours thereafter the white count was 14,400 per cubic millimeter and a noticeable improvement had taken place in the swollen organ. Twenty-four hours after the second injection of lactigen, the prepuce was easily retracted and other small foci of the infection were seen for the first time. After five injections of lactigen these were completely healed, when again a return was made to the routine treatment of arsphenamine, alternating with bismuth or mercury.

On the 20th of September, this patient was normal at the site of the infection, save for the cicatrices, but his request was that he be given the milk injection, because he felt better under its influence than he did after the arsphenamine or bismuth.

In one case there was a failure of the artificial leukocytosis to control a large chancroid promptly and completely. This lesion appeared five or six weeks before it was first seen by the writer, on the 27th of

August; there was also a severe gonorrheal infection.

The patient was given 10 cc. of lactigen. On the 29th, the gonorrheal discharge was less and there seemed to be a noticeable improvement in the depth of the chancroid. Before the second injection the white cell count was 8,000 per cmm., and twenty-four hours thereafter it was 12,900 per cmm. On the 7th of September, while the lesion seemed a bit more shallow, there was an extension of the infection in the skin.

About this time a letter was received from Dr. Hugh H. Young, in which he suggested the combined use of mercurochrome and the protein. This was done, after a white cell count of 9,600 per cmm., by the intravenous injection of 10 cc. of 1-percent mercurochrome and the intramuscular injection of 5 cc. of lactigen. Twenty-four hours thereafter the white count was 13,000 per cmm., but again there was no noticeable change in the lesion. The gonorrheal infection seemed much better. The chancroid had an application of nitric acid and four days thereafter was improved.

On Saturday, the 10th of September, an attempt at a modification of the plan suggested by Dr. Young was made, to better maintain the increase in the white cells. To this end the patient was given 10 cc. of lactigen and 1 grain (65 mgm.) of succinimide of mercury, intramuscularly, after a white count of 8,600 per cmm. The following day being Sunday, the second count was done on Monday morning and showed an increase of white cells to 15,900 per cmm.

Unfortunately, this patient was not seen until September 23, his absence being accounted for by legal complications. On this day, he seemed to show a rapid improvement in the chancroidal infection, under the influence of the well-maintained artificial leukocytosis after the injection of lactigen and succinimide of mercury.

These counts show very clearly the power of the succinimide of mercury for the maintenance of an artificial leukocytosis, as well as the higher count that follows the injection of a protein. Determinations on the white cells of this patient have shown very plainly that after lactigen the count returns almost to normal in forty-eight hours, and further, that the increase in the white cells follows very quickly after its injection. For example, the white count of this patient was nor-

mally about 8,000 per cmm. On one visit, several days after he had had any artificial stimulation of the white cells, he was given 10 cc. of lactigen, and sent immediately to the laboratory. Thirty minutes after the injection of the protein the white count was 12,500 per cmm. Would not these easily checked determinations explain very logically the increasing use of mercury and a protein in the treatment of many infections?

Succinimide of Mercury

Inadequate laboratory facilities have prevented a study of the effect of succinimide of mercury on the white cells, in any considerable number of cases, but enough has been done to show that these cells are markedly increased in number, as has been found with all of the other mercurial preparations which have been studied. However, the clinical effects of this preparation, in intramuscular injections of 4/5 to 1 grain, (50 to 65 mgm.) are remarkable.

My attention was drawn to this drug by a paper by Dr. George B. Lake, in the *New York Medical Journal*, for April 17, 1915, in a report of the treatment of nineteen cases of gonorrhea by the injection of mercury succinimide. Of this number, 75 percent were free of the gonococcus in from two to six days. The successful results were in the chronic infection, in soldiers. The 25 percent, called failures by Dr. Lake, were in Filipinos, over whom there was no control.

During the past three months, observations of the effect of the succinimide, after some six or seven hundred injections of the drug, in doses of 4/5 to 1 grain, (50 to 65 mgm.) have been made and, as an indication of what has been seen, a greater number of injections of this agent are being made every week.

The good effects of its administration are more quickly seen in chronic gonorrhea than in the acute stage of this infection. With the Wassermann-fast patients, immune to arsphenamine and bismuth, there is an immediate improvement in their sense of wellbeing and, in spite of the marked discomfort that follows its administration, they ask for more of the "painful shots" on their return visits.

"Dr. Chas. H. Halliday, 1st Lieut. Medical Reserve Corps, U. S. Army, noted an interesting point in several of the cases and reported it to me in a note regarding Case VIII, as follows: 'There are bodies

in this smear which, to me, present very interesting possibilities. On June 23rd and 24th, this case showed numerous gonococci, by Gram's method; on June 25th, it was found negative; after a careful examination, however, there were numerous Gram-positive organisms found in the smear. On June 26th, there were a few Gram-positive cocci present, though the smear is negative for gonococci. Throughout the field there occur many oval bodies, varying in size from a coccus to 1/3 the size of a red blood cell. These bodies present the following appearance: The smaller ones are stained throughout their structure; as they increase in size the staining reaction becomes somewhat changed; the organism appears to be deeply stained about its margins, becoming paler as the center is approached, until, in the largest forms, the body is stained only at the edge, leaving a clear space within, more than half the size of the body. Examination of the slide also presents very minute bodies, much smaller than a coccus, and deeply stained. While an opinion of any value should not and cannot be advanced simply on the staining reaction of an organism, it is worth while to remember that all bacteria make some effort at self-protection when being subjected to adverse conditions; also that those bacteria which form spores, at first become enlarged, their staining reaction changed, and in their last stage present a body entirely changed in shape and size.'

"This note opens up a field of study for bacteriologists who have an opportunity to observe any cases which may be treated by this method by other observers."

The foregoing quotation from the article by Dr. Lake, on gonorrhea and the succinimide of mercury, referred to above, furnishes a striking corroboration of the observation of the changes in the cholera vibrio under the phagocytic phenomena of the destruction of these invading organisms, as reported by Metchnikoff, in his "Immunity in Infective Diseases." This change of the vibrio to granules is called Pfeiffer's phenomenon.

As suggested by Dr. Lake, these laboratory findings would appear to open a fruitful field for study in the laboratories. However, it seems to me that any study of immunity would be but a check on the determinations of Metchnikoff, for my clinical observations of the behavior of infections after the production of an artificial leukocytosis, convince me that the great Russian biologist solved the riddle of the ages—that the last word was said when he gave it as his conclusion, after about twenty-five years of research, that the "One constant element in immunity, whether innate or acquired, is phagocy-

tosis." Future study in the laboratories will reap its richest reward in finding agents which will still further increase the numbers of the white cells and maintain that increase longer.

No single case shows the power of the succinimide better than that of a negro, whose mixed infection of syphilis and chancroid had brought him to about the same condition as that described in another patient in a foregoing paragraph, in which the whole penis was greatly swollen and a retraction of the foreskin could not be made, even after 11 or 12 injections of arsphenamine, bismuth and metaphen.

With the satisfactory results following the change from the usual practice in the first case, following the administration of lactigen, it was determined to try the succinimide on the second case. This patient was given 1 grain of the succinimide. Four days thereafter he reported at the clinic with a smiling face saying, "Thank God and you too, Boss, 'cause I thought I wasn't going to see it again, and it's gittin' right now." Again the lactigen, 10 cc., with 3/5 grain (40 mgm.) of succinimide, was given, with still further improvement on the next visit, after which a return to the routine treatment was made.

Tryparsamide and Armervenol

Late in July I was told by Dr. W. D. Partlow, superintendent of the Alabama Insane Hospital, that tryparsamide was being used in the treatment of paretics in his hospital, with better results than he had found in the application of other plans. I suggested that cellular resistance was being stimulated by the tryparsamide. Dr. Partlow very kindly directed that counts be made before and after giving this drug. His letter and counts follow:

"Complying with your request, I attach hereto our laboratory report on four paretics being treated with tryparsamide. These cases have had treatment for some time, which is given for a period, then stopped, and renewed for another period. The laboratory made blood counts before administration, then six hours, twenty-four hours and forty-eight hours following treatment, in each instance. You can use this for what you may consider it worth. (Signed) W. D. Partlow, M.D., Superintendent A. I. H.

	Normal	6 hrs.	24 hrs.	48 hrs.
Heaton	5,200	8,800	7,000	5,400
Kahn	9,000	13,000	10,000	10,800
Bobo	8,800	14,800	9,400	9,000
Judge	5,600	8,900	5,800	5,400

Slight increase in cell count was due to increase in Polys."

Recently my attention was drawn to the report of Lieut. F. I. Ridge, M.C., U.S.N., R.F., Great Lakes Training Station, in 1919 (See CLIN. MED. AND SURG., Jan. 1927, p. 30), on the treatment of influenza by the intravenous injection of a colloidal preparation of arsenic, copper and mercury, called armervenol and a comparison of its effects in the creation of a much greater artificial leukocytosis than was found after the injection of convalescent serum. Dr. Ridge found that there were fewer complications in the 90 cases treated by the administration of armervenol than were seen following other plans. This observer gave his conclusions as follows:

"In conclusion, our observations warrant us in believing that the colloids of mercury and arsenic were of distinct benefit in the treatment of the epidemic influenza and its pneumonia. That this improvement is not due solely to the eliminative actions of the drugs, we believe is demonstrated in the remarkable leukocyte stimulation, as evidenced by our observations. (Signed) F. I. Ridge, Lieutenant M.C., U.S.N., R.F."

A Case of Pellagra

The history of a case of pellagra, which I saw first on September 24, 1927, seems to furnish fairly conclusive evidence that we live because of the beneficent activities of the phagocytes.

On the suggestion of a dentist, Dr. L. A. Tatum, I was called to see a woman of forty-five who was said to be dying. I was inclined to agree, after a hurried examination. The illness began early in June. Typical, symmetrical lesions were present on hands and forearms; she was incontinent and unconscious. The malady was said to have shown a predominance of the mental and nervous symptoms since the beginning of her illness. Her muscular system was in a state of clonic contractions.

On account of her mental condition, she was sent to a nursing home several weeks before I saw her, where she stayed three weeks. Her condition becoming a bit weaker, she was sent home. A neurologist and mental consultant was called, who gave it as his opinion that she could best be cared for during her remaining days in the State Insane Hospital.

An injection of 4/5 grain (50 mgm.) of succinimide of mercury was given. On Sunday morning, sixteen hours thereafter, I was greeted by the smiling faces of the assembled family, and at once told that the patient had slept well; that, for the

first time in several months, she had called for milk and eggs on awakening. Inspection showed the absence of the contractions of the muscles though she was still incontinent. The temperature was normal, when it had been 102°F. the afternoon before. On being asked how she felt she whispered, "I'm better, Doctor."

Her son, an enlisted man from the Medical Corps of the Navy, had returned seven days before, on account of her illness, and had been nursing her during the week, without her realization of his presence. On

this same Sunday morning she expressed her pleasure at his return.

On the 27th she was given 0.45 Gm. of neoarsphenamine. The husband has just telephoned that there was a fair reaction, that she did not sleep well, but that this morning she appeared brighter and better and was calling for milk and eggs when he left.

The outcome of this case will be of interest, but it was not I and it was not the mercury, but solely the phagocytes, that worked a seeming miracle.

Comer Building.

Meeting of the Southern Medical Association

Reported by GEORGE B. LAKE, M.D., Chicago.

THE *feel* of the Southern cities is different from that of those in the North. The people are cordial and seem interested in one. The towns themselves may be a bit down at the heel, but folks *live* in them.

Sometimes one is tempted to generalize, to the effect that the friendliness of a community is in inverse proportion to its physical progressiveness; but all generalizations are dangerous, and the fallacy of this one can be proved by attending a meeting of the Southern Medical Association, than which no medical meeting of the year is more progressive or enthusiastic.

There is a *feel* about this group of physicians, too. Other bodies of medical men are serious, scientific and in earnest, but nowhere does one sense just the same enthusiastic *eagerness* to gain practical help in dealing with the clinical problems of daily practice.

The meeting this year was held in the charming city of Memphis, Tennessee, in their great municipal auditorium, which is the most satisfactory place for a gathering of this kind that I have yet seen—everything was under one roof.

The arrangement of the program was a cross between that of such groups as the American College of Physicians or the Interstate Postgraduate Medical Assembly—where all the sessions are general and there are no section discussions—and that of the American Medical Association—where there are none but sectional meetings. Two days were devoted to general

sessions, where prominent men (mostly from the South) presented clinics and clinical lectures, without discussion; and two to sectional meetings, where anyone who had something to say could say it—and many said good things, forcibly.

The commercial exhibit was large, well arranged and eagerly studied by the doctors present; and the scientific exhibit, while rather small, was unusually helpful, in a practical way, and aroused much interest.

The transactions of this meeting will, when printed, fill a large volume, but I shall pick out a few of the many valuable discussions which I heard and report them briefly, in an attempt to give a bird's-eye view of this splendid session.

Business began at 9 o'clock on Monday morning, November 14, 1927, with a series of clinical lectures.

Treatment of Peritonitis

By E. M. Holder, M.D., Memphis, Tenn.

Babcock says that when *fresh* pus is found in the abdomen it should be left there, to stimulate the formation of antibodies. Do *not* drain these cases, but close up the belly. Drainage is needed only when *necrosis* or *old, dead* pus is present.

Hypodermoclysis should be used freely, but *not* the Murphy drip, which is liable to stimulate peristalsis. No opium should be given.

Peritonitis with ileus is due to Welch's bacillus. These organisms thrive in the alkaline contents of the cecum. Welch's

antitoxin is useful in these cases, acting, perhaps, as a foreign protein.

If the *appendix* is found imbedded in adhesions, *do not disturb them*. Cut off the diseased organ and simply tie the stump, without attempting to turn it in. Get in and get out as rapidly as possible. Do not manhandle the structures. Leave no blood. Close without drainage.

Injecting Gasserian Ganglion with Alcohol for Tic Douloureux

By R. C. Bunting, M.D., Memphis

We must distinguish between tic douloureux and other forms of trifacial neuralgia. If the attacks of pain last longer than *two minutes*, the condition is *not* tic douloureux. Bilateral cases are rare.

Nitrous oxide gas is the best anesthetic for injecting the Gasserian ganglion. After the needle has been inserted the patient can be allowed to wake up, and thus one can test for anesthesia of the nerves at once, before withdrawing the needle.

Use a slender needle, but one long enough to reach the ganglion without forcing. If the needle passes through the ganglion, *temporary* paralysis of the 6th, 7th and 8th nerves may result.

After injection of the ganglion, the eyelids on the injected side must be kept closed and attended to carefully, as the cornea will be insensitive for about 15 days, and therefore subject to injury; after that period tactile sensation usually returns.

Peripheral injection of the 5th nerve produces temporary results (about six months) and must be repeated; but injection of the ganglion is as permanent in its effects as is section of the posterior roots.

[See article by Dandy, CLIN. MED. AND SURG., Dec., 1927, p. 919.—Ed.]

Acne and Late Syphilis

By Robt. G. Henderson, M.D., Memphis

Acne: In women showing acneiform eruptions on the cheeks, nose and chin, look for intestinal and uterine disorders. Most of these patients do not get enough roughage in the diet.

For treatment, *small doses* of x-rays are helpful, and also local and general ultra-violet irradiations. Lactigen should be injected intramuscularly, to build up the resistance.

All cases of acne show the acne bacillus, which becomes active under conditions un-

favorable to the host. Vaccines *alone* will do no good, but they are useful adjuvants to other measures. They must contain *B. coli*.

Late Syphilis. Skin gummas are likely to be *bilateral and symmetrical*. (A case was shown with gummas on the flexor surfaces of both forearms, just below the elbows. This case had been wrongly diagnosed and treated as eczema. The Wassermann test was 4 plus.)

Free Wassermann tests, made by public laboratories, give us great assistance; but laboratories are not infallible. We must use them, of course, but our diagnoses must rest on *history and clinical symptoms*. We need more dark-field examinations for early recognition of these cases, permitting *early treatment*.

Make an agreement with these patients to treat them for so much a *year*, and *not* by the visit. Then give them treatment *enough*, and thus avoid neurosyphilis later on. We must treat *patients*, not diseases.

Pernicious Malaria

By Wm. Krauss, M.D., Memphis

When a patient with pernicious malaria is comatose he requires prompt and special measures. I give an intravenous injection of *sodium bicarbonate* to render the patient alkaline; one or two intravenous injections of 100 cc. of 5-percent *dextrose* (glucose) solution; quinine, intramuscularly or intravenously. In the latter case, the doses should be small—5 grains (0.325 Gm.) every 4 or 5 hours for 3 or 4 doses. If you give 15 grains (1.0 Gm.) of quinine intravenously, to a patient with syncope, you will kill him by depressing his blood pressure. Where possible it is best to give quinine by mouth. Many comatose patients will clear up on routine treatment.

Algid malaria is always serious. These patients are never comatose, but show severe gastrointestinal symptoms—vomiting and diarrhea. Alkaline treatment will frequently save them.

Malaria sometimes causes abortions. Watch for it; and remember that not all gynecologic infections, with fever, are due to pyogenic organisms—some are caused by malaria.

Physicians' Business Bureau

By H. B. Everett, M.D., Memphis

Most physicians have had trouble with collection agencies and the doctors of Memphis are no exception.

In 1919 we organized the Memphis Physicians' Business Bureau, and incorporated with a capital stock of \$2,000, divided into 200 shares at \$10 each. In 1920 we affiliated with the Retail Credit Men's Association and paid dues of \$3 a month. In 1922 we established our own collection agency.

The entire organization is under the management of doctors and for their benefit. Accounts are collected for and credit information given to members only, and these must be in good standing in the County Medical Society. Later, dentists were admitted, upon payment of an admission fee.

We now have a general manager, several collectors, clerks and stenographers, a lawyer, and a deputy-sheriff, to serve papers. All expenses of the office are paid by commissions on collections, and we now have a surplus on hand.

The members send their bills into the office and these are forwarded to the debtors and followed up until they are collected. Up to the present, we have collected \$529,702 in old bills which were considered worthless by the physicians to whom they were due.

The collection charge runs from 15 to 50 percent (depending upon the age, character and size of the bill), averaging 22 percent. All employees are bonded and all members sign a contract. Money due to members is paid to them on the first of every month.

It is suggested that accounts for medical services be charged to the husband and wife, jointly, as this sometimes obviates difficulties in collection.

This organization has proved very profitable to the physicians of Memphis, and costs the members nothing, if they cooperate by sending in their bills.

[We feel sure that those interested can obtain further information by addressing the Bureau at 66 S. 3d St., Memphis, Tenn.—Ed.]

Research and Medical Progress

By Pres. J. Shelton Horsley, M.D.,
Richmond, Va.

In every case of death where the cause is not absolutely clear, an autopsy is imperative: In all cases it is of great value.

Research is not limited to specialists working in great laboratories and hospitals, but is possible for all physicians. Jenner, Koch, Sims, MacKenzie and many

others who have contributed immensely to medical progress were country doctors. Every physician should be following out some definite problem of research, along with his daily work.

Obesity

By James S. McLester, M.D., Prof. of Medicine, University of Alabama, Birmingham, Ala.

Very obese and very old persons should be reduced in weight very gradually. Slow reduction is the only safe procedure, in any case. There is no reason for attempting to reduce the weight of children, as they need much food for growth.

A reduction treatment requires courage and cooperation on the part of the patient. It means teaching him how to eat—*re-educating his appetite*. We should spare the patient serious hunger, protect his body proteins, so that the loss will be of fat only, and cause a reduction of not more than five or six pounds a month, thus avoiding anemia and undue weakness and allowing the skin to adjust itself to its decreasing contents.

The diet prescribed must not be a freak affair, but one the patient can live on, comfortably, all his life. It should be 25 percent below the minimum metabolic needs, figured on the ideal weight for his height and age. If the stated requirements are 35 calories per kilogram of body weight, begin with 25 calories or less, per kilo, and gradually cut it down until a loss of weight is obtained. Protein, to the extent of 100 Gm. daily, must be given (milk, meat, eggs, etc.), remembering that, while vegetable proteins have a high caloric value, their biologic value is not so high as that of those derived from animal sources.

It is well to give small quantities of sweets, in order to increase the sense of satisfaction and make the patient more comfortable. The caloric value of these should, of course, be carefully estimated.

Syphilis and Pregnancy

By J. R. McCord, M.D., Prof. of Obst. and Clin. Gynecology, Emory Univ.,
Atlanta, Ga.

Syphilis is the cause of death in 57 percent of stillborn babies, but it is not syphilis itself that kills them; the vessels of the placenta are occluded, as a result of the maternal infection, and they die for lack of blood. This has been shown by thousands of examinations.

Active treatment of the syphilitic mother influences the character of the placenta

in 50 percent of cases, and the children are born alive at term, even though the mothers' blood is still Wassermann-positive. The baby is still syphilitic—the organisms can be found in all organs and tissues—but it does not show a positive Wassermann test until later in life.

Infantile Diarrhea

By Wilburt C. Davison, M.D., Prof. of Pediatrics, Medical School, Duke Univ., Durham, N. C.

Diarrhea, in infants, falls into two groups: those showing dysentery bacilli, and the others. Dysentery occurs in about one-third of all cases of infantile diarrhea and kills more babies than all other infections together.

The onset of **dysentery** is sudden, in 80 percent of cases. The stools, after 36 hours, are small (about a tablespoonful), frequent (up to 30 per day) and contain blood and pus; fever and pain are present; the patient is dehydrated. Death occurs within 12 days in 20 percent of cases; the others are normal after 15 days; 2 percent more die during convalescence.

When the time of onset of an infantile diarrhea can be stated, to the day and hour, the condition is dysentery in 90 percent of cases. There is an actual inflammation of the bowels and the characteristic bacilli can be found in the fresh stools.

In dysentery the bacteriophage does not work, clinically. Treat the dehydration by saline infusions; give paregoric to secure rest; give acid milk with a high protein content.

Polyvalent vaccines of the proper type, injected hypodermically, will prevent dysentery and stop epidemics. The administration of these vaccines is somewhat painful.

Agglutination tests are useful in diagnosis if all of the six strains are used—one Shiga and five Flexner organisms.

Diarrheas of the "unknown" group are well described by the common names, "watery or fermentative diarrhea." The stools gradually increase in number, are large and watery and contain no blood or pus, though mucus is often present. There is little or no fever and no true inflammation in the bowels.

In searching for the cause of these conditions, it seems to be found in the duodenum. This organ is normally empty (except soon after a meal) and sterile, except for the presence of moulds. In

these cases we find *B. coli* and other bowel organisms present, together with undigested food. No enzymes are present in the duodenum of children who die of ordinary diarrhea. Perhaps there is an ascending infection, due to some physiologic change. The end products of either putrefaction or fermentation can cause increased peristalsis.

It is unsafe to operate (as for acute mastoiditis) upon a child who has dysentery; but watery diarrhea is no contraindication—in fact, the operation may remove the cause of the diarrhea. [See article by Alden and Lyman, in *CLIN. MED.* for Nov., 1925, p. 747.—Ed.]

Bromides in Vomiting of Pregnancy

By L. A. Calkins, M.D., Prof. of Obst. and Gynecol., Univ. of Virginia, Charlottesville, Va.

Vomiting during pregnancy has been classified as: (1) neurotic; (2) reflex; and (3) toxic or pernicious. All are abnormal conditions and all are the same, varying only in degree.

If a woman fails to gain weight in pregnancy the conditions are abnormal and she will vomit. The vomiting may cause malnutrition and finally starvation acidosis.

The indications are to stop the vomiting and fill the patient full of food, so that she will gain in weight.

The method to be used in severe cases is as follows:

1.—Put the patient to bed and give no food for 24 hours.

2.—Wash the lower bowel and give 60 grains (4 Gm.) of sodium bromide, in 2 to 3 ounces (60 to 90 cc.) of water, by rectum, every 6 hours, using a small rubber catheter. If the fluid is expelled, raise the foot of the bed 15 inches.

3.—If acidosis is present, give glucose (dextrose) intravenously.

4.—Increase the diet to 2,500 or 3,000 calories or more daily, mostly carbohydrates—candy is good.

5.—After 3 or 4 days, reduce the dose to 50 grains (3.325 Gm.); and after 2 or 3 days more, to 40 grains (2.650 Gm.) every 6 hours. Keep up the feeding.

6.—By the end of a week the patient can generally take the bromide by mouth. The dose should then be 15 grains (1 Gm.) 3 or 4 times a day.

7.—When the patient has gained 8 or 10 pounds in weight she can return to a normal diet.

In mild cases the rest in bed and the rectal medication will not be needed.

No failure has resulted in 200 cases treated by this method; results are prompt; the treatment can be carried out in the home, if directions are followed to the letter; little laboratory work is required; therapeutic abortion is very rarely necessary.

A bromide rash has occurred in about 5 percent of the cases, but is of no importance. One percent showed a bromide psychosis, which cleared up in from 2 to 6 weeks. In such cases, chloral hydrate or phenobarbital (luminal), in appropriate dosage, may be used to control the vomiting while the patient is being overfed.

Management of the Newly Born

By L. R. DeBuys, M.D., Prof. of Medicine, Tulane Univ., New Orleans, La.

The period during which a child is considered newly-born extends from the tying of the cord to 1 month of age.

1.—*Prevention of Injury.* Tie the cord tightly and carefully; resuscitate simply, using alternate heat and cold or the Sylvester method; do not inflate the lungs mouth-to-mouth, as this exerts too much force on the delicate lung structures.

2.—*Diseases.* Know your stuff and work promptly. Atelectasis, hemorrhage, jaundice, inanition, etc., can be treated satisfactorily if treated early.

3.—*Heat Maintenance.* Give no bath until the child is 24 hours old—if underweight, wait longer than that. Cleanse with warm oil only.

Very small babies should be kept in incubators until their temperature remains normal when naked. Then reduce the temperature gradually—95°F. for 24 hours; then 90°; and so on.

4.—*Prevention of Infection.* Ophthalmia and tetanus neonatorum are now rare.

Attend to all birth injuries carefully; attend to the mother's nipples, to prevent thrush. It is well to apply a solution of gentian violet to the nipples and areola at the time of labor.

Protect the infant from curious friends.

5.—*Feeding.* Gavage should be practiced when indicated, using milk from the mother or a wet-nurse.

Attend to the mother's nipples during pregnancy, remembering the anatomy and

physiology, and there will be little trouble after the child is born.

Pharmacology of Dermatologic Prescriptions

By Andrew L. Glaze, M.D., Birmingham, Ala.

When good effects are not produced by the remedies prescribed for skin diseases, we will do well to examine the preparations dispensed.

The benzoined lard in drug stores is always rancid. It must be made up fresh each time; or, better still, use "Crisco" or "Snowdrift."

Lotio Alba is hard for many druggists to make. Watch it.

"Liver of sulphur" (*potassa sulphurata*) must be liver-colored if it is to be of any use.

Aluminum acetate solution requires 2 days for its proper preparation.

Glycerogelatin cannot be made with commercial, granulated gelatin; the sheet gelatin used in laboratories must be employed.

The only good balsam of Peru is that prepared by Merck.

Watery solutions of menthol always go wrong in drug stores. Rub up the menthol crystals with sodium biborate and then add the water, making it fresh each time.

Tell your patient what the prescription ought to look like, and then he will know when it is obviously wrong.

The Ketogenic Diet in Epilepsy

By W. W. Harper, M.D., Selma, Ala.

Sixty percent of epileptics are relieved by a ketogenic diet, but there is no way to tell, in advance, which ones will experience benefit. Failures are often due to breaks in the diet. It is difficult to keep children on a high-fat diet—they will steal carbohydrates, sweets and fruit.

Protein is needed, in the proportion of 1 Gm. to each pound of body weight; carbohydrates about 30 Grams a day; with 3 to 5 times that quantity of fat. Plenty of leafy vegetables should be given, with much oil dressing; much butter; a very little bran bread or crackers, meat, milk, etc.

The acetone in the urine must be 3 or 4 plus if results are to be expected.

This method is indicated where attacks occur daily; it is too severe when attacks are rare. If the patient does not improve, add phenobarbital (luminal), as required.

The Physician and Social Hygiene Education*

By THOMAS W. GALLOWAY, Ph.D., New York City

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FOR the purposes of the present discussion we must assume—whether warranted in doing so or not—that medical schools in their instruction and physicians in practice are doing all that needs to be done in relation to the venereal diseases. Also,—which is a still more dubious assumption—that they are giving adequate attention to the psychopathologic sequelae of our idiotic neglect and mismanagement of the whole sex sector of life in the constructive education of our young people.

The foundation upon which I wish to place whatever positive suggestions I have to make relative to this enterprise of giving to the young an adequate and suitably graded understanding, appreciation and respect for sex is composed of the following planks:

1.—The human monogamous family life, with all its very obvious shortcomings, is at once the most important and beneficent of our social institutions. It is at the same time the most successful. That is to say, while it is seldom ideally perfect and often a complete failure, it comes more nearly doing, in the great mass of homes, a reasonable portion of the things it is set up to accomplish than do our churches, our educational institutions, our courts of law, our governments, municipal or national, or even that pride of our modern culture—"business". When we consider how much more subtle, intimate and delicate are the relations in a human family than in any of the other institutions mentioned, the wonder is, not that there are many partial or even total failures, but that, with so little rational and emotional preparation, such complex relationships *ever* succeed.

2.—Sex and reproduction make the family. All other factors are incidental. These functions and their impulses and expressions, together with the irradiations of these into all the other phases of home relationship, go to make up the most inspiring and humane of all our human interests. The failure on the part of founders of families, first as mates and later as parents, to understand, in advance of marriage, how much of a part sex and reproduction ac-

tually play in full family success is largely responsible for the degree of marital wreckage we now find.

3.—It is just as possible to give the young a preparation for this aspect of successful life as for any other; and suitable scientific attention and emphasis put upon this kind of preparation will yield more returns in the way of effectiveness and happiness for us than if placed at any other point.

4.—To give our young, from the cradle onward, just what they need of sex education to fit them in emotions, in character and in knowledge to meet this group of life issues and relations and to be fine mates and parents, in their turn, is a community job—the joint task of every lover of his kind.

The part which the physicians and other agents and agencies of health should have in this enterprise is large and vital. In many ways the problem is a health problem—physically so, certainly—but even more a problem of emotional and social health, resting strongly on personal adjustments with which the physician is concerned. Hence, "social" hygiene.

In spite of his scientific training and of the obviously close connection of this aspect of hygiene with other phases of disease prevention, the average physician feels himself to be, and actually is at present, largely unfitted to do in this field the part of this work of human education for which he should be the person of outstanding fitness.

The physician's obligations grow out of the fact that he is not a professional person merely. He is at the same time one of the leading human units of his community. He has just the same obligation to use his position of prominence and technical knowledge for social leadership as have other members of society; this in addition to his obligation to be professionally effective.

His usual unconvincedness, aloofness, and unpreparedness for leadership in this part of hygiene seems to be due to deficiencies in his professional training. This instruction has emphasized the pathologic rather than the normal, constructive aspects of sex, and when not actually flippant and

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cynical, has been, at least, lacking in any enthusiastic or convincing emphasis upon the knowledge and the technic needed by the physician in assuming the scientific and cultural leadership in this field of social health. Medical schools have for the most part ignored the health implications of sex in relation to emotions, conduct, character and social well-being.

When the well fitted physician has overcome the shortcomings of the usual medical instruction about sex, and has built for himself, upon his scientific preparation, a positive conception of social hygiene and its educational possibilities, we find a combination which furnishes a leadership of glorious potency.

To enable a physician to carry the full conception of even "preventive medicine" into the realm of sexual health, whether personal or social, in an effective and logical way, calls for training better than anything now furnished by the medical schools. But all aspects of hygiene have now passed beyond the stage of mere disease prevention. Whether physical, mental or social, hygiene is now conceived as looking directly toward positive, maximum, *abounding* health, with freedom from disease as only a by-product. This calls for every emphasis by all health agencies upon constructive education in all that makes for effective living. In this education of the people medical schools must have a leading place.

Possibly one can suggest by a single outline: (1), what would seem justly to belong to the function of physicians, in the field of social hygiene education, on behalf of the parents, the children, the youth, and the young people of marriageable age among their patients; and (2), something of what every first-rate medical school should therefore include in its curriculum in order to fit him to render this service. This material can either be combined in a separate course or, better, be distributed among appropriate existing courses. An elementary but sufficient treatment of each of these topics may be given in from one to three periods.

1.—Elementary facts about the role of sex in normal human growth and development.

2.—The instincts and impulses connected with sex and reproduction, and some points at which these normally modify the psychic qualities of individuals.

3.—Elements of sexual psychopathology, of the more common and obvious types.

4.—The social significance of normal sex and reproduction, as seen in courtship, love, marriage, the home, parenthood and family life; and the bearing of these upon human physical and mental health and welfare.

5.—Elements of the pathologic social aspects of sex and reproduction and the influence of these, both on social health and individual health.

6.—The wide and inclusive responsibility of all enlightened community agencies to cooperate in seeing that the scientific, esthetic, social and ethical elements in the situation shall be appreciated, included and combined in guiding public opinion and public institutions. These problems should not be solved exclusively upon the grounds of biology or physical health; nor, on the other hand, on a basis merely of sentiment and idealism. Both are necessary to a healthy conception of values, and to hygienic living.

7.—The special part the enlightened physician can play (and owes to humanity, as a technically trained man) in such a community attack upon the complete problem, and his obligation of scientific leadership in social betterment, especially in this field.

8.—The physician and his opportunity and responsibility for sex enlightenment of his patients, of parents, personally and in relation to sex instruction of their children at different ages; for direct help to his young patients, from childhood on; direct help in understanding the sexual adjustments necessary in married life. The elementary pedagogic equipment needed for this should be furnished.

9.—Certain more prevalent sex fallacies which are early communicated to young men, for which there is no adequate scientific support and the significance of these for honest marriage and human social adjustment. These mistaken ideas include: that sex intercourse is necessary, either for personal or sexual perfection of development, in either men or women; that abstinence is not compatible with physical or mental health; that men should have special privileges of sex indulgence not granted to women; that a period of illicit sex indulgence leads to some sort of personal superiority and poise of character; that a life of sexual restraint leads to worse emotional complexes and unbalance

than a life of sex indulgence; that sexual control and continence are a sign of weakness; that illicit sex intercourse is at worst an indiscretion;—and the like.

I appeal to you, as scientists, as servants of your kind and as sons, brothers, husbands or fathers, to urge your medical

schools to incorporate in their curriculums an adequate approach to a real, constructive understanding of sex and of *true social hygiene*, as distinguished from the mere teaching of venereal disease prevention which masquerades under that name.

370 Seventh Ave.

The Vaccine Treatment of Pneumonia

By J. M. FRENCH, M.D., Milford, Mass.

THIS is not an essay on the best method of treating pneumonia. Personally, I doubt if there is any such thing. The best way I can express my idea in that direction is by saying that the best treatment for any given pneumonia patient is that which the attending physician best understands, has the most confidence in as a whole, and knows best how to adapt to individual cases, according to the symptoms and attending circumstances. It varies for each doctor and for every patient. Also, it changes in most cases with each year in the practice of the same physician. This does not mean that some methods are not better than others, or that there may not be some one method which is better than any other. Indeed, this is what we ought always to be on the lookout for. But if the medical profession does its duty, the best treatment today will not be the best tomorrow.

In my paper in *CLINICAL MEDICINE* for December, 1926, I asked, but did not completely or finally answer, the question, "*Is Treatment of Any Value in Pneumonia?*" I gave some of the statistics which have been presented in favor of the negative view of this question; but I did not pretend to be satisfied with the answer as then given, nor to be willing to accept it as final.

I shall, in this paper, try to present some of the reasons in favor of the affirmative answer to the question. For, whatever may have been the case twenty-five or fifty years ago, when the negative arguments were accepted as valid by the great majority of medical men, I maintain that, in the present state of our knowledge of this disease and the better understanding which we now have, not so much of its nature and symptoms as of the means of controlling them, we are justified in saying that treatment

is of very great value in pneumonia. More than this, I believe that we are now in possession of therapeutic measures which are of greater value, which can prevent more suffering, shorten more cases, and save more lives, in the treatment of pneumonia, than in almost any other equally serious acute disease.

Changing Opinions

I quoted the positive statement of one of our greatest medical teachers, that "pneumonia runs its course uninfluenced in any way by medicine. It can neither be aborted nor cut short by any known means at our command." But I have since learned that this last statement is omitted in the recent editions of the work which contained it; indicating that either Dr. Osler himself, or his successors who are responsible for the revision have, to some extent at least, modified their original opinions. Truly, the world moves.

The accepted theory and common practice fifty years ago, was to sustain the patient and let the disease run its course. This fact, together with the change in more recent times, is well illustrated in a letter which I have recently received from Dr. I. L. Van Zandt, of Ft. Worth, Texas, who is well known to all the old readers of *CLINICAL MEDICINE*. He writes that in the 1870's he was accustomed to tell his friends that he did not claim to cure pneumonia, but only to take care of the patient and wait for nature to cure the disease. But so greatly have his views and practice changed since those days, that he ends by saying, "I do not now say that I cannot cure pneumonia."

Medicine was given, in those days, mainly to relieve the special symptoms, such as the pain, the fever, and the cough; also to sustain the heart. No effort was made to abort the disease itself, and no thought was given to the possibility of so doing. But

since those days we have learned a number of things relating to the treatment of disease; and one of these is that the best physician is not the one who pulls the most patients through the gravest complications and the most serious dangers, but rather the one who so treats his patients from the beginning that these things *do not often occur*. It must be admitted, however, that this is an ideal which is not always easy of fulfilment.

The fundamental principle of dosimetry—of which active-principle therapeutics is but a modification—as stated by its great originator, Burggreave, is that, “Dosimetric medicine rests essentially upon its power to jugulate those fevers in which all acute maladies have their commencement Its great end is to prevent anatomic-pathologic lesions; for these, once established, are beyond the resources of art.” To put it in the language of today, the strong point of dosimetry is its power to abort disease. This doctrine ought not to be new or strange to the readers of CLINICAL MEDICINE AND SURGERY, but the new methods, to which these principles opened the way, have led to a new system of treating patients ill with pneumonia, whose results far excel those of the older methods which were in general use when the statistics quoted in my paper of December, 1926 were collected. Read the papers which have appeared in this journal on the treatment of pneumonia for the last twenty years. Compare the methods employed now with those which were in use in the hospitals whose results were given, in which the conclusions adverse to the value of any treatment were drawn, and see if you do not agree that the later methods were calculated to lead to more recoveries, and to influence more favorably the course and duration of the disease, than were the former.

But I am not writing this paper for the purpose of advocating the principles of alkaloidal medication. These have been adopted, to a very considerable extent, by physicians generally and the way is now open for new advances. The treatment which I now desire to present differs radically, both from the older methods and from the active-principle methods. It is founded on a different principle, which is only recently coming to be recognized and adopted by the so-called authorities in medicine. But it is not new to the most of you.

The older ones have read about it in CLINICAL MEDICINE AND SURGERY and other standard journals, while the younger ones had it taught to them in the medical schools, and most of you have used it to some extent in your practice. This is the vaccine treatment; and the general verdict is strongly and increasingly in its favor. My own attention was drawn to it very largely by the use of the bacterial vaccines in other and closely related lines, as I tried them first in my own individual departures from health, and later in the cases of my patients who were similarly affected. The results were so favorable, as a whole, that I was led to look with favor upon the same methods in pneumonia.

Reports of Vaccine Treatment

Perhaps the most complete and satisfactory report which has as yet been presented of cases treated by this method, is that made by Dr. Alexander Lambert, of New York, which was read before the Association of American Physicians, at Atlantic City, in 1926, and has since been summarized in CLINICAL MEDICINE (Oct., 1926, p. 755) and other leading medical journals in the country. It is based upon the treatment of 221 cases of pneumonia in all forms, by the vaccine treatment, at Bellevue Hospital, for the four years from 1922 to 1926. In connection with these, for purposes of comparison, 286 cases were treated by means of the usual supporting treatment, but without the vaccines. The two classes were treated simultaneously in the wards. The cases were not selected ones, but were taken as they came, without regard to any other elements. The vaccine used was a mixed stock vaccine, sterilized without heat. In each cubic centimeter were contained 200 millions of the influenza bacillus, 100 millions of the pneumococcus, 100 millions of the bacillus micrococcus, 200 millions micrococcus catarrhalis, and 200 millions each of staphylococcus albus and aureus.

The usual dosage of this vaccine was 1.5 cc., repeated every six hours as long as the temperature was above 99. When it fell to this point, the frequency of the dosage was reduced to once in twelve hours for one or two doses, and then to once in 24 hours during convalescence.

The patients included those of all ages, from 13 to 80 years and over. They also included a considerable number of acute alcoholics, which helped to raise the mor-

tality rate to a marked degree above what it would have been if these had been excluded. But in the statistics as given, all are included. No special mention is made of these cases in the published article, or at least in the summaries of it which I have seen; but I learned of it from a personal correspondence with Dr. Lambert. It would be interesting to learn, in future statistics, the usual mortality rate of this class.

Also included in the statistics are the four types of pneumonia, each characterized by a different germ and known as types I, II, III, and IV. All of these received the same treatment.

Note here, that while it is probably necessary, in testing the results of different forms of treatment, to observe a routine, essentially the same in all cases, in order to get an unprejudiced view of the general effect of the remedies on the average cases, yet with the private practitioner the case is very different. Having gained the benefit of the experimental work such as is here described, it is his duty to judge for himself as he studies his cases, which patients will do best under one form of treatment, and which under another, or with slight variations from either. He does not treat his patients in the mass, but in detail. It would be a grave error for him to treat all his patients by the same formula, or with the same drugs. It is this peculiarity, for one thing, which rightly gives him the reputation of having a smaller death rate in pneumonia that that obtained by the hospital physician, who deals with his patients more in the mass, and so, in cases where a new treatment is being tested, of necessity more according to a routine method.

As I understand it, the treatment of the vaccine cases was limited to the vaccines, except when symptoms requiring special attention were present, such as a failing heart, severe cough, or extreme pain; and in these cases, whatever symptomatic remedies were indicated were used. On the other hand, in the control cases, symptomatic remedies only were given, no vaccines being used in any case.

While the whole number of cases is not sufficient to warrant any hard and fast conclusions—something which can only be justified by long and careful testing, repeated by different men, working under different conditions and varying circum-

stances—yet, all things being considered, this test seems to have been the most definite and carefully carried out of any as yet reported.

Dr. Lambert's Statistics

	Vaccine Mortality	Control Mortality
All cases 1922-26.....	21.2%	40.5%
Cases treated within 48 hours of initial onset.....	5.8%	42%
Cases treated within 72 hours of initial onset.....	9.8%	37%
Cases treated after 72 hrs.....	26.6%	42.3%
Type I Pneumonia.....	8%	17%
Type II Pneumonia.....	16%	72%
Type III Pneumonia.....	12%	35%
Type IV Pneumonia.....	17%	27%
Patients 50 years or over.....	33.3%	59%
Patients under 50 years.....	16.4%	29.9%

The average mortality of the 221 cases treated by the vaccines during the entire four years was 21.2 percent, while that of the 286 cases treated by the usual symptomatic method, here known as the control treatment, was 40.5 percent. This sums up the results as a whole, considering all the cases treated by both methods, all classes included, all ages of patients, and all types of the disease. *The death rate was reduced very nearly one-half.*

The next test relates to the time of beginning treatment. Briefly stated, when the treatment was begun within 48 hours from the onset of the disease—presumably reckoning from the initial chill—the percentage of deaths under the vaccine treatment was 5.8 percent; while under the control treatment it was 42 percent, or more than seven times as great. When the treatment was begun between 48 and 72 hours from the beginning of the disease, the mortality of the vaccine cases was 9.8 percent, and of the control cases 37 percent, or three and two-thirds times as great by the control as by the vaccine treatment. The period of three days from the beginning of the disease seems to mark the limit of time during which the treatment must be begun in order to secure the best results and the lowest mortality. When the treatment was not begun within this time, the average mortality was 26.6 percent by the vaccine treatment, and 42.3 percent by the control treatment.

The next method of comparison has to do with the different types of the disease, all of which are included under the term, lobar pneumonia. These are known as

types I, II, III, and IV. Here the results were somewhat unexpected, since the vaccines were found to be effective in lessening the mortality in all four of the types, though the degree of improvement produced varied greatly in the different types, being the largest in type two, and the least in type four. This was the more surprising in that professional opinion had previously held that the benefits of any vaccine treatment was much more limited in some of the types than is indicated by these figures. In type I the vaccine mortality was 8 percent, the control 17 percent; in type II it was 16 percent for vaccine, and 72 for the control; in type III, the vaccine mortality was 12 percent, the control 35; in type IV, vaccine 17 percent, control 27 percent. This shows a gratifying reduction of the mortality in each of the types. It also indicates that it is not necessary to type the cases in order to treat them successfully, since the same mixed stock vaccine is effective in all the types.

The fourth point considered is the age of the patients. It is no new thing that pneumonia is exceptionally fatal in old people. But the important thing indicated here is that the vaccine treatment lessens the mortality very nearly to the same degree in patients over fifty years of age that it does in those under fifty. This fact in itself is remarkable. In patients under fifty years of age the vaccine mortality was 16.4 percent, and the control mortality was 29.9 percent. In cases over fifty, the vaccine mortality was 33.3 percent, and the control was 59 percent. The proportionate difference is very slight.

Not A Symptomatic Remedy

A word as to some of the claims which are made for this treatment. It is not a symptomatic treatment. That is, it is not directed to the control or removal of symptoms as such. At the same time it is a potent force in the modification and removal of symptoms, lessening the severity and limiting the duration of the disease and increasing the proportion of recoveries. These results, however, are not secured by antagonizing the symptoms directly, but rather by reinforcing the efforts of nature to remove the cause and overcome the disease.

While it is not a symptom remedy, it does not prevent, hinder, or in any way interfere with the action of any remedies

which may be used to meet the special symptoms, such as digitalis to sustain the heart, opium to relieve pain, expectorants to loosen the cough, or any others which may be needed.

More than upon any other one thing, the success of the vaccine treatment depends on *beginning early*. This is clearly shown by the statistics presented. And this fact runs in a line with the fundamental principle of the alkaloidist, that the most important thing about the treatment of disease in general is that *it should begin early*.

It is claimed that there are no contraindications to this mode of treatment. This is perhaps a rash statement, since there may yet be found conditions not compatible with the use of the vaccines. However, none such have as yet been discovered.

Again, it must be remembered that the paper from which I have taken most of my statistics, and upon the conclusions of which I have very largely relied, is the work of one man; and that he is still continuing his tests, carrying on his work, not claiming that his conclusions are more than temporary, but to be revised as time goes on and his cases multiply.

Not too great importance should be placed upon these preliminary experiments and conclusions, yet certain things stand out clear and plain. The vaccine method bids fair to lessen by one-half the mortality from pneumonia which was common under the older methods of treatment. In the cases for four years, as reported, when the treatment was begun within three days from the onset of the disease, the mortality was reduced to less than ten percent, and when it was begun within 24 hours from its onset, to less than six percent.

Then there is the further fact, already referred to, that the same combination of mixed stock vaccines proved to be useful in all forms of acute pneumonia, so that it is not necessary to type out the four forms and use a different vaccine for each of the types. This is an important point, especially to the country physicians, who may not always have at hand the facilities needed for carrying out the more extended program.

Here, then, is a treatment which promises to reverse the dictum of Osler, and undo the statistics which have been relied upon to prove it. Here is a means now at our command which does influence both the course and duration of pneumonia, which

does, in a large proportion of cases, either abort or notably shorten the disease, and does cut down the average death rate very nearly one-half; a treatment, in short, which is of unexampled value in pneumonia.

These are its claims, and here is the evidence presented to substantiate the claims. Is it not worth while to investigate the method? Will it not pay you to try it in your practice?

2 S. Main St.

Certified Stains

What They Are and What They Mean to the Physician

By H. J. CONN, Ph.D., Geneva, N. Y.

Chairman, Commission on Standardization of Biological Stains.

A NILIN DYES have been used for some time in microscopic work; but it is only recently that a scientific study has been made of their behavior when employed as biologic stains and an attempt made to secure a dependable supply. This study has been made by the Commission on Standardization of Biological Stains, and the stains which they test are put on the market under the name of certified stains.

The general practitioner, it is true, does not have very much need of biologic stains in his own work. Nearly all of his microscopic work is done at some diagnostic laboratory and he ordinarily never sees the slides after they are prepared. Every now and then, however, for some special purpose, he may want to make some microscopic preparation himself and may therefore need to use some stain. Whether he employs stains himself or not, he must realize that much pathologic and diagnostic work is dependent upon the use of dyes that can be counted upon to give satisfactory results in staining microscopic preparations.

It may not be generally realized that, in the case of nearly all of the important biologic stains, it is now possible to make a purchase knowing that a sample of the identical batch from which the purchase is made has been tested by laboratory workers skilled in the procedures for which the stain is ordinarily used. The stains in question are those that have been approved by the Commission on Standardization of Biological Stains. This Commission was organized about five years ago by the National Research Council. It is not a part of the Research Council but it is closely affiliated with it. Its activities are supported primarily by an appropriation from the Chemical Foundation. This support was

first given to this work on a small scale at the time when it was still being carried on by a National Research Council committee. The president of the Chemical Foundation, Mr. Francis P. Garvan, was foreseeing enough at that time to realize how important a work of this nature might become; and thanks largely to his interest, the appropriation for the work has increased nearly every year. This has made it possible for the Commission to undertake quite an extensive program.

The Commission at the present time carries on various activities. At the chairman's laboratory at Geneva, certain research work is being pursued looking towards the suitability of different dyes for microscopic purposes and with the object of determining what chemical compounds are actually desired when a certain dye is specified for some definite microscopic procedure. Through the Chairman's office, various investigations along this same line in other institutions are coordinated so that they all fit into the general Commission plan; the results of these investigations are printed in the journal, *Stain Technology*, published quarterly by the Commission. Thanks to this research work we now know more nearly than ever before just what is needed when a pathologist, for example, calls for methylene blue to use in a tissue stain or for gentian violet to employ in the Gram stain for diagnosing gonorrhea. Formerly both of these dyes were poorly understood mixtures.

The Commission also examines dyes put on the market and, if satisfactory, permits them to be sold with a label indicating the approval of the Commission. In this way a considerable degree of standardization has already been accomplished. The difficulty in drawing up chemical or physical

standards has made it necessary to adopt this rather empiric method of standardization.

The specifications at present drawn up by the Commission for the various stains contain, in addition to the chemical and physical requirements, a clause essentially as follows: "The sample must prove satisfactory in the . . . method for staining . . . This point should be tested by someone familiar with the technic in question." It is hoped that eventually it may be discovered just what physico-chemical characteristics indicate a satisfactory stain in each particular instance and that then such clauses as these may be dropped from the specifications, but that time is still some distance in the future.

In order to apply such a requirement as that quoted above—especially in view of the fact that two batches of a dye may differ in their staining qualities without detectable difference in chemical characteristics—it is necessary to submit each individual batch of any stain to an expert in the procedures for which it is used. This is done with all the stains sent in to the Commission for certification, as well as having them submitted to a physico-chemical analysis. Unless the samples are found satisfactory by those who test them, they are not allowed to be sold with the Commission certification label.

The certification label on any bottle of stains means, therefore, five things: (1) a sample of the batch bearing the label has been submitted to the Commission for testing and a portion of the sample is permanently on file in the chairman's office; (2) the sample proves true to type, as judged by spectrophotometric tests; (3) its dye content is up to specification and is correctly indicated on the label; (4) it has been tested by experts in the procedures named on the label and has been found satisfactory by them; and, (5) no other batch can be sold under the same certification number except by such a flagrant breach of confidence on the part of the company as to risk losing the good will of the Commission.

Two different forms of certification labels are in use. One is fairly large ($1\frac{1}{2}$ by $3\frac{1}{2}$ inches in size) and bears the name of the stain as well as the certification statement. The other is much smaller (1 by $1\frac{1}{4}$ inches) and bears only the certification statement.

This certification statement appearing on both forms of labels is as follows:

"Found satisfactory by Commission on Standardization of Biological Stains for purposes mentioned on label. Use for other purposes not contra-indicated unless specifically so stated on said label. Will users please report any unsatisfactory results to the chairman, H. J. Conn, Geneva, N. Y."

Until recently the labels have also borne the statement, "Certification not valid unless label is embossed by Commission seal". This seal has been embossed on all the labels before they left the chairman's office. As a further protection against fraudulent use of the label they have also borne the signature of the chairman.

It has been found, however, that the embossed seal makes it difficult for the manufacturers to handle the labels. Accordingly a new form of label has now been adopted which they can use more conveniently. On the new label, the Commission seal is repeated as a continuous background design (as on safety check paper), in light-blue ink, and the statement concerning the lack of validity without the seal has been removed.

At the present time both the old and new style labels are on the market. Users must understand that there is no difference in their significance, whether the Commission seal be embossed on the label or worked into the background design.

These labels are sold to the manufacturers at the rate of 4c each. This is done so that the manufacturers will bear a part of the expense involved in testing the stains. This gives the Commission a small amount of independent income; although, without outside support, it could carry on only a small part of the present activities.

For all these reasons it is plain that if a physician wishes to do any microscopic work himself, he should purchase Commission certified stains for his purpose, so as to have confidence that he can obtain satisfactory results. The mere fact that he so seldom employs stains in his work makes it impossible to carry out an investigation himself to learn whether a lot he has purchased gives the results expected of it. If he does not obtain good results, therefore, with a stain that has not been tested, he has no way of knowing whether the fault lies in his technic or in the sample of stain that he has bought. If he is em-

ploying a certified stain, however, he knows that this particular batch has given others good results and can be certain that there is no reason why, with proper manipulation, it should not act correctly in his hands.

Certification on one or more of these stains has been issued to each of the following manufacturers and standardizers of biologic stains: Coleman and Bell, Empire Biochemical Co., Hartman-Leddon Co., McAndrews and Forbes, National Anilin and Chemical Co. and Providence Chemical

Laboratory. A stain may be ordered from one of these companies direct when it is known which companies have submitted to the Commission the particular stain desired; or it may be secured through one of the dealers in general laboratory supplies. In the latter case the purchaser must be sure to specify Commission certified stains. In doing so he will be sure that he is purchasing from a batch of which a sample has been tested by one or more experts skilled in its use.

Agricultural Experiment Station,

A Self-Eliminating Profession

The medical profession is the only one where good and efficient work tends to reduce the prosperity of those in it. The plumber does a good job, but corrosion is his ally and soon he must come back to repair the pipe he installed last year. The lawyer wins the case, gets paid for writing up the agreement, and makes more work for himself by writing it in such a way that, in case of dispute, he alone can interpret what he has done.

But the good and worthy doctor cheats himself every time he does a good job. He improves the sanitary system of a town—and loses a few hundred potential typhoid cases. He discovers, as Pasteur did, the germ theory, and immediately reduces the number of his future patients.

All of which is good, right and proper, and in perfect accord with the noble and high aims of the profession. But doctors tell us it is getting tougher and tougher every day to make a living, to say nothing of a competence, in a field where good work cuts down the chances for future livelihood.—
R. & C.

The Seminar

[NOTE: Our readers are cordially invited to submit fully worked up problems to the *Seminar* and to take part in the discussion of any or all problems submitted.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, North Chicago, Ill.]

Surgical Problem No. 1 (1928)

Presented by Dr. W. G. Parker,

Mt. Vernon, Ill.

(See C. M. & S., Dec., 1927, p. 940)

Recapitulation.—A fleshy woman of 72 years had suffered for some time with constipation and "bleeding hemorrhoids."

When seen she complained of severe nausea and vomiting, so that food could not be retained. This had continued for several weeks. Her temperature was 100°F.; pulse 88; blood pressure, 170/100; a trace of albumin in the urine.

Her condition became worse. A proctoscopic examination showed "internal hemorrhoids," and the instrument was arrested by an obstruction 5 or 6 inches above the anus. Later, fecal matter appeared in the urine, a mass became palpable above the pubes, and the patient gradually sank and died about two months after she was first seen.

Discussion by Dr. M. O. Robertson,
Bedford, Ind.

The history of an acute abdominal attack with later gastro-intestinal disturbance and constipation is very suggestive of gall-bladder infection, and the rise of temperature is still further suggestive. To me, the blood pressure and pulse rate have no significance. Nausea and vomiting, may, of course, arise from conditions outside the gastro-intestinal tract, but this patient began with vomiting and diarrhea four months ago and still has abdominal distress.

It is almost certain that the urinary findings significant of a kidney lesion and the blood pressure elevation are coincident rather than causative factors. Were the fever coming from disease of the urinary organs, we would find pus in the urine, very probably *macroscopic*, but certainly on microscopic examination.

The bimanual examination indicates there has been an inflammatory process in the

pelvis at some previous time; as no tenderness is mentioned it is presumed to be absent.

I doubt that the doctor saw internal hemorrhoids through the proctoscope. It is not an easy matter to see them in that way—the anoscope or speculum is usually necessary. The proctoscope must be drawn almost entirely out of the anus to see internal hemorrhoids through it. I spent a year with a rectal specialist of some reputation, and we never looked for hemorrhoids with the proctoscope. Dr. Parker must have seen *something*, which, I judge, was really what obstructed the passage of the proctoscope, and no description is given of what the obstruction looked like, if, in fact, it was seen.

The diagnosis rests between malignant disease of the rectum and an abscess in the pelvis, which finally ruptured, causing recto-vesical fistula; and I think that, beyond a doubt, it was the former.

Of course, the patient may have had hemorrhoids, which at times are due to portal obstruction. This may have also been present, due to metastasis to the liver, thereby causing the gastric symptoms by direct irritation. The patient may not have had hemorrhoids but a bleeding from the condition (ulcer, polyp or new growth) which finally obstructed the bowel and killed the patient.

Discussion by Dr. C. J. Snitkay,
Belle Plaine, Iowa.

There are many points that need clearing up before a correct diagnosis could be made; for instance, the nature of the obstruction on the passage of the proctoscope and the previous history, which, to me, is the most important factor in any chronic ailment. That is entirely missing in the Doctor's description. Surely this lady had been suffering from a chronic digestive disturbance. The acute attack that the Doctor describes must have been only one of many similar attacks. This attack certainly must have been due to an obstruction of some nature, which the Doctor controlled by limiting her intake of foods, even if he does not admit that to be a fact.

Briefly, to me, the diagnosis is: Carcinoma of the sigmoid, with metastasis to the bladder (possibly also involving the uterus), sloughing through into the bladder cavity. This had been well walled off for the weeks the bowel drained into the bladder. On January 26, there was further sloughing and a general peritonitis developed, which was the direct cause of dissolution.

**Discussion by Dr. Chas. E. B. Flagg,
San Antonio, Texas**

In Surgical Problem No. 1 (1928), Dr. Parker has lucidly portrayed a case of cancer, ulcerating through the rectum and bladder.

As to criticism of Dr. Parker or the previous attending physician for not making an earlier diagnosis, I would ask any general practitioner who has been in active practice ten years or longer to open the criticism. "Let him that is without sin cast the first stone." Then I would say to the accused, "Go thy way, and in the next similar case make, at least, a digital examination of the rectum."

I would judge Dr. Parker had verified the suspected diagnosis on November 25 and 26, when he made a pelvic and rectal examination.

Additional Data by Dr. Parker

I was permitted to partly examine the body while an undertaker was embalming it. I opened the abdomen and found many nodular growths, involving the uterine fundus, rectum, tubal and ovarian regions. There were many dense adhesions between the uterus and rectum. A perforation existed between the bladder and uterus, but as the parts could not be removed the exact extent was not determined. The left thigh was blue. The uterine growth and extensions produced a mass as large as a quart cup. A diagnosis of inoperable malignancy was confirmed.

Solution by Dr. Max Thorek

Now Gentlemen, let us pull our chairs closer and discuss intimately the problem of Dr. W. G. Parker (Problem No. 1—Page 940 of the December issue of CLINICAL MEDICINE AND SURGERY).

Henceforth, it will be my privilege and pleasure to discuss with you various surgical problems. That will be a real enjoyment, indeed. To exchange thoughts with you, and create that ideal surgical fellowship which, it is hoped, will benefit our-

selves and our patients alike, is an undertaking truly worth while. Let us not mince words. Let us eliminate as much as possible, the "may-be's and the "perhaps's" and let us endeavor to analyze the problems before us from an unbiased and unselfish point of view.

There is in most human beings, particularly in ourselves—the disciples of Aesculapius—a little "center of vanity" tucked away somewhere in our subconscious spheres, which makes us think that somehow or other we are just a little bit better than the "other fellow." That is a wrong attitude, of course. You or I may know a little more on this or that question, but after all, as men, we meet on the very same level.

Let our minds be free from prejudices and purged from preconceived notions, that we may build our diagnosis on sound analytic foundations. In that manner only we shall all reap benefit.

In case some of you feel that further discussion of any problem is necessary and that a certain problem before us has not been exhaustively studied, it will please me immensely to open the discussion with you individually again and enter further analytic study.

We have all studied the problem of Dr. Parker quite carefully, so that it is not necessary to review the history, but to pick out the salient points in connection with the case. Remember that Dr. Parker was called to treat his patient after a confrère had treated her for a considerable period, so that diagnostic and therapeutic omissions chargeable to the first doctor cannot be laid at the door of Dr. Parker.

When he saw the patient first she had been suffering from gastric manifestations for which he prescribed palliative measures. His attention was focused primarily on the alleviation of the evident gastric distress. In this he succeeded. I concede that a pelvic examination, as well as an exploration of the rectum should have been made at the earliest possible moment. This would have tended to clarify the situation, and would have pointed to the proper avenue of therapy.

The history of the onset of a disease being of paramount importance, when the patient is seen in the later stages of the disorder, it certainly would have been of great value to know whether there were any symptoms pointing to a primary in-

testinal, or primary uterine, involvement. It would certainly be of great advantage to know about the findings of a bimanual examination, supplemented by proctoscopic inspection. In the history as given, nothing is said about any vaginal discharge, bleeding, loss of weight, etc. A great deal could be learned from an examination of the stools for occult blood. The presence of mucus and pus in the bowel evacuations is always significant. This can easily be done by any good physician, by employing very simple methods. It is my opinion that the gentlemen who had the case in charge from the first should have done all of these things.

It is not at all necessary to have an elaborate laboratory in order to find occult blood and other pathologic products in the urine and feces. The average physician should be able to perform these tests, whether he be practicing in New York or in Tankville. The information obtained from these simple tests is of utmost value, particularly during the onset of the disease.

The bimanual examination made by Dr. Parker on November 25, 1927, disclosed an enlarged uterus, fixed in the pelvis. It is not stated how large that mass was. I am rather dubious that the tumor mass, with its multitudinous metastases, found at the autopsy had grown so very rapidly and assumed the proportions found on December 31, without being distinctly palpable at an earlier date.

Now what are the most important differential diagnostic points of view to be considered in this case? We must, of course, take into consideration the outstanding features, such as:

- 1.—Age of the patient.
- 2.—The intermittent fever found (this is very often found in advanced carcinoma cases).
- 3.—The perforations of carcinoma between the uterus, bladder, and rectum, with evidence of fecal matter in the urine, causing bladder tenesmus.
- 4.—Evidence of a pelvic tumor, on examination.

My belief that the primary seat of the trouble was in the uterus is based upon the following factors:

a.—No evidence of early objective or subjective symptoms pointing to involvement of the rectum or bladder.

b.—The perforation, I believe, has taken place from the uterus into the bladder rather than into the rectum, or vice versa (rectum to bladder).

c.—The presence of symptoms of general toxemia, as often found in pelvic carcinoma (study symptomatology in this case).

In the *Differential Diagnosis* the following conditions come under consideration:

- 1.—Carcinoma of the rectum.
- 2.—Carcinoma of the bladder.
- 3.—Carcinoma of the stomach.
- 4.—Tuberculosis of the rectum.
- 5.—Syphilis of the rectum.
- 6.—Perforative diverticulitis of the intestine.
- 7.—Actinomycosis of the intestine.

1.—Carcinoma of the rectum would show earlier bowel symptoms, such as tenesmus, blood, pus or mucus in the stools; intermittent diarrhea and constipation; palpable tumor mass and visual manifestations on proctoscopic examination.

2.—In carcinoma of the bladder we find the urinary symptoms more pronounced (tenesmus, pain, blood, mucus and pus) and the usual cystoscopic findings of bladder neoplasm.

3.—In carcinoma of the stomach there are: epigastric distress, often a palpable tumor, anacidity, occult blood, etc.

4 & 5.—On account of the pyrexia in the case under discussion and the evidence of *rectal stricture* on proctoscopic examination, the possibility of a *rectal tuberculosis* or syphilis must be considered. Tuberculosis usually involves the lower portion of the bowel, with a tendency to the formation of fistulas and proctitis. *Stenosis due to syphilis* is usually also seated low down and can frequently be felt by the finger. It gives many symptoms similar to carcinomatous stricture.

6.—Perforative diverticulitis of the intestine. In recent years the large bowel has come very much to the front as a factor in producing serious intra-abdominal mischief, via the diverticulitis route. I shall discuss this clinical entity at greater length at a future date.

7.—Actinomycosis of the intestine, requires serious comment, on account of the patient having lived in a rural community. In this disease all of the coats of the intestine are invaded and the process extends to the peritoneum, with the production of massive adhesions; later the retroperitoneal

tissues become involved, in other cases the disease infiltrates and finally perforates the anterior abdominal wall.

In these cases the tumor may be of any size, up to the bigness of a fist. It is hard, insensitive, at first freely movable and later becomes fixed to the abdominal wall. This method of development is, however, quite exceptional. Symptoms of stenosis of the bowel are rare. Fever is usually present, and will be more or less marked according to the extent of the accompanying pyogenic infection. The patients become emaciated and anemic. If the pus infection is severe they will, from time to time, exhibit more or less marked leukocytosis.

Although observed in a very few cases, a general infection of the entire body with the organism is extremely rare. Other organs may be invaded, such as the liver, the pleura, the bladder, the kidney, or other portions of the gastro-intestinal tract.

The prognosis of intestinal actinomycosis, untreated surgically, is most unfavorable. In the absence of sinuses and the recognition of the fungus in the discharge, a positive diagnosis of actinomycosis of the intestine can hardly be made. In the rarer cases, exhibiting a movable tumor and symptoms of stenosis of the gut, the diagnosis from cancer would be impossible. The more diffuse and boardlike the infiltration, the more probable is the diagnosis. When the infiltration is retroperitoneal it may be mistaken for retroperitoneal tumors, tumors of the pelvis, or for psoas abscess from disease of the vertebra or sacro-iliac disease.

Comments

Summing up the evidence presented in the case under discussion I am inclined to the following diagnosis: *Primary malignant disease of the uterus, with secondary involvement of the rectum and the bladder and finally metastases in the stomach.*

I base my diagnosis on the following factors:

- 1.—Age of patient; chronic onset of disease, with acute exacerbations.
- 2.—Intermittent fever (very often found in advanced carcinoma).
- 3.—Perforation of cancer from the uterus into the bladder and rectum, with evidence of fecal matter in the urine, causing bladder symptoms, also autopsy findings.

4.—Evidence of a pelvic tumor on examination.

Under the existing conditions, Dr. Parker did all he could. None of us could do more nor treat the case differently taking all factors and apparent handicaps into consideration.

I agree whole-heartedly with the views expressed by Dr. C. B. Flagg, of San Antonio, Texas. The first line of his discussion proves that he also inclines to the belief that the primary seat of the trouble was in the uterus. Dr. Flagg impresses me as a real fellow who displays the true Aesculapian spirit. He certainly appears to live up to his Hippocratic oath.

Dr. Snitkay is right when he insists on more definite data before a correct diagnosis can be made. However, Dr. Parker furnished all available data and wants a discussion of the case based upon the material he has at his disposal. In an honest endeavor to get at facts we must take what we have. I cannot, however, agree with the diagnosis of carcinoma of the sigmoid, made by Dr. Snitkay. If he will review the case carefully, keep the various available data in mind and compare them with what I have outlined under differential diagnosis, I feel confident he will be able to agree with me.

The splendid dissertation of Dr. M. O. Robertson, shows that the advantages of thorough proctoscopic examinations are self-evident and contains many truths about the advantages to general diagnosis by means of thorough exploration of the accessible portions of the bowel.

Let us not forget that, at the time Dr. Parker was called to see the case, the condition of the patient was too far advanced to indicate any further exploratory methods. The diagnosis of malignant disease was evident and all was done that could be done to alleviate the patient's suffering and assure her comfort.

An iliac colostomy, under local anesthesia, might have been done and thereby eliminated the bladder symptoms and contributed to the patient's comfort.

Problem No. 3 (Medico-Surgical)

Presented by Dr. F. G. de Stone,
Modesto, Calif.

A woman, age 38 years, presented herself for treatment June 14, 1927.

History: Married 10 years and living with her husband (who claims to have had

no venereal disease), but has never borne children. Menstruation regular and no discoverable abnormality of the sex functions or organs.

Fifteen years ago an intensely painful tumor, the size of a walnut, developed in one of the axillae, without any other notable symptoms. This tumor, which she believes to have been a lymph gland, was removed surgically, which relieved the pain. The patient continued to feel well, but began to lose weight, gradually.

About 6 years ago, during one of her menstrual periods, there came a rush of serous fluid from the right nipple, and this leakage has continued, more or less profuse, up to the time I saw her. At no time has there been any pain or discomfort, except the annoyance of having to wear a pad continuously to absorb this secretion.

Condition on Examination. The only complaint was marked emaciation—the patient was 5 ft. 7 in. tall and weighed 109 pounds. During the menstrual periods the breasts become enlarged and somewhat hard, returning to normal when the flow ceases.

Laboratory Examinations: *Blood:* Red cells, 3,400,000; white cells, 7,200; hemoglobin 65 percent; color index 0.9; polymorphonuclears, 58 percent; lymphocytes 39 percent; many poikilocytes. *Urine:* urea, 2.08 percent; a trace of albumin; no indican; many uric acid crystals and amorphous urates, with a few bacteria. *Wassermann test,* negative. *Secretion from the breast* reported as a serous fluid, contain-

ing a few staphylococci (possibly from the skin) but no pus cells.

Treatment and Progress: This woman was given a very varied and extensive line of treatment. The diet was carefully regulated; a daily enema ordered; physical therapy treatments—ultraviolet, infrared, diathermy and high-frequency—were given thrice a week.

Medication consisted of endocrine products—orchic, ovarian, thyroid and parathyroid substances, nephritin and protomucin, by mouth, with hypodermic injections of orchic fluid once a week; and, in addition, a number of drugs, including several homeopathic and eclectic remedies.

At the end of four months, the patient had gained 15 pounds in weight and felt much stronger and more fit. She looked five years younger and was able to be on her feet all day without undue fatigue. The blood showed: red cells 4,650,000; white cells 8,800; hemoglobin 75 percent; color index 0.81; polymorphonuclears 66 percent; lymphocytes 29 percent; no poikilocytes.

The serous discharge from the nipple continued without change, up to about the middle of October, when it stopped entirely for about two weeks. At the time this report was made a few drops of the fluid had again appeared, coincidental with menstruation.

Requirements: (1) probable etiology and diagnosis of condition; (2) general discussion of management of the case; (3) prognosis and suggestions as to future treatment.

Clinical Notes and Practical Suggestions

Neonal in Nervous and Mental Disorders

I BELIEVE that one should be very conservative in regard to any new preparation and give plenty of time to show both the primary, perhaps beneficial, effects and the more distant, perhaps disagreeable, or even dangerous results.

We have now used neonal so much, in fact, we are prescribing it so generally, that I am not able to state the definite number of cases in which it has been used. However, I am very safe when I place the number of different cases (by which I do not mean the number of individual prescriptions, but rather the number of patients) at not less than 100. The total number of prescriptions exceeds 5000.

We have at first experimented considerably in different varieties of cases, but at present, we are prescribing neonal largely for the following conditions. I am stating these in the order of preference, in accordance with our experience:

1.—States of high nervous tension, especially with depressive coloring, the patients suffering greatly from phobias and obsessions. The relief experienced by the patient is almost uniformly remarkable. Not only the mental tension subsides, but the patient relaxes, the cold hands and feet become warm and the patient usually thanks us for the wonderful relief obtained. Even the opium derivatives, which we religiously keep away from, cannot produce such a profound result as that obtained from this drug.

2.—We find that neonal reduces all forms of depression; also it is unquestionably most efficient in cases where this depression is combined with high nervous and emotional tension.

3.—Either singly or in combination with other hypnotics, neonal is a very efficient hypnotic and we use it in many cases.

In addition to the cases referred to above, we find that neonal acts somewhat

as a sedative in many varieties of pain but, in our judgment, its chief influence, even in that respect, is largely in calming the nervous tension, perhaps fear, under which the patient is laboring. Another group of cases where neonal has proved of value is in cases of epilepsy, where it appears to be almost as valuable as luminal, although larger doses are necessary.

The most striking results have been in three cases of compulsive neurosis (phobias and obsessions). One patient, a woman of 36 years, whose existence had been that of more or less continual torture and who actually contemplated suicide to end it, has improved, both physically and mentally, to such an extent that life not only has become bearable, but actually a source of pleasure. She is now traveling in Europe, but would not go until I issued to her a supply of this sedative.

The remarkable fact in this case is that there may be two or three weeks during which she will not take a single dose of this remedy and then, perhaps, for two or three days she may require as many as two or three tablets (each $1\frac{1}{2}$ grains—0.1 Gm.) a day. She certainly has not developed any drug habit. Incidentally, I may say that I do not know of any case where this habit has been developed.

In this case, we have made many tests, including not only tests of blood pressure and general circulatory efficiency, but the effect of this drug upon elimination of waste matter, upon digestion and general nutrition. It is evidently not injurious. The fact is that this patient weighs more now and is in better physical condition, from every point of view, than before this drug was used. The other cases referred to were similar and the results were equally satisfactory.

I must add, to make the report complete, that we find some patients do not tolerate

the drug well. I have found two cases developing dizziness, unsteady gait and an impairment of speech, as a result of comparatively moderate doses. These were not cases of compulsive neurosis.

V. H. PODSTAT, M.D.,

The Livermore Sanitarium,
Livermore, Calif.

UNEXPLAINED DEATH

(A Further Report)

In connection with my report of the unexplained death of an infant, which appeared in CLIN. MED. & SURG. for October, 1927, on page 781, and was discussed by Dr. Bleil in the December number, page 948, I did not state that an autopsy revealed a hemorrhage from the underside of the liver, the abdomen being filled with clotted blood.

None of those who had handled the baby could remember that it had fallen or received a blow of any kind; there was no stove in the room where the baby slept; nor was there evidence of the possibility of smothering. It is possible that the father may have had a syphilitic infection at some time.

M. B. STINE, M.D.,

Des Moines, Ia.

[This is interesting; but what caused the hemorrhage? A birth injury, perhaps?

Paternal transmission of syphilis is not established, even if this disease could be proved in the father.—ED.]

CLINICAL FALLACIES

Neurasthenia

There is, no doubt, a syndrome which may properly be called neurasthenia, but too many physicians make such a diagnosis in order to save themselves the trouble of undertaking a thorough examination of the patient. This condition should never be diagnosed except after *complete exclusion* of every possible organic disease.

The true neurasthenic is born, not made. He has always been a neurasthenic and will be found, on careful study, to show stigmata of biologic defectiveness—vasomotor instability, easy fatigue, etc. If his symptoms have developed suddenly or rapidly he probably has something other than neurasthenia.

In organic nervous diseases there is a definite *block* somewhere between the brain

and the sensori-motor organs; and the pathologic manifestations will be *different* on the two sides of the body, constituting focal symptoms. If these are not present the lesion is not organic.

The Common Cold

There are occasional cases of simple, acute rhinitis or pharyngitis which correspond to the popular idea of a "common cold." These will recover in a day or two under any treatment, or none.

But where the condition persists for some time, or the patient is "subject to colds," there is some underlying condition which must be sought for and removed.

The largest percentage of colds are expressions of local nasal pathologic conditions—sinus infections, deflected septums, etc.—so that treatment with quinine, atropine, acetylsalicylic acid, etc., is practically useless and surgery is needed. These cases may be relieved, temporarily, by placing a cotton tampon, soaked in 10-per cent argyrol solution, *high up* in the nasal fossa and letting it remain for 30 minutes.

If the symptoms are in the pharynx, the infection is probably in the tonsils (even though there may not be a typical tonsillitis), and tonsillectomy, followed by a course of general ultraviolet irradiations, will put an end to a long succession of "colds."

General systemic infections are often masked by local symptoms in the nose. These will show chills, fever, headache, muscle pain and malaise, out of proportion to the local findings. The treatment here is discovery and removal of the cause and general detoxication.

Indigestion

All abdominal symptoms were formerly referred to the stomach and were spoken of as "indigestion."

The continued presence of epigastric pain, nausea, belching, etc., which make up the picture of "indigestion" may be due to: (a) gastrointestinal causes outside the stomach; (b) cardiovascular disease; or (c) organic stomach lesions.

A.—The commonest extragastric causes are gall-bladder disease and chronic appendicitis.

In gall-bladder indigestion, the symptoms are comparatively mild and of long standing; are distinctly affected by the food eaten, especially fats and sugar; and are improved by exercise.

In chronic appendicitis, the onset is more marked and the symptoms more severe; all kinds of food are alike; and the symptoms are made worse by exercise.

The x-ray will settle the diagnosis.

B.—Symptoms of indigestion are often the only early signs of cardiac embarrassment, especially attacks of "acute indigestion" in middle-aged or elderly persons. Arteriosclerosis and nephritis also show gastric symptoms as their first manifestations.

C.—No study of a case of "indigestion," especially in middle-aged or elderly people, is complete without considering gastric ulcer and carcinoma. In these conditions there will usually be a certain *definiteness* about the history—steadily increasing, localized pain; constant relation to taking food; loss of health and strength; etc.

Every patient who is sufficiently troubled with indigestion to consult a physician should receive a barium meal and have it followed, with the fluoroscope, from mouth to anus. By this means alone can positive evidence of the anatomic condition of the gastrointestinal tract be obtained.

Heart Disease

Actual disease of the heart is rarely shown by pain in the precordium, and such pain is generally due to other causes. True cardiac pain is mesial, oppressive and is increased by exercise.

Heart murmurs are by no means a sign of cardiac damage or incompetence. Myocardial disease, which gives no murmurs at all, is more dangerous than a considerable valvular defect, giving a loud murmur, which is well compensated.

Rheumatism

This word has covered much medical ignorance and laziness. Generally it has included: (a) acute rheumatic fever (an infectious disease); (b) arthritis deformans (chronic, productive arthritis); and (c) gout (a metabolic disorder). The word "rheumatism," as a diagnosis, should be eliminated from our professional vocabulary.

Teething

The "old women"—and, unfortunately, some doctors—used to attribute all disturbances in children under 2 years old to "teething." Then the pendulum swung over and many felt that this process had no effect on a child's health and well-being.

The actual eruption of the teeth can not cause symptoms, other than local irrita-

tion; but the *teething period* is one of physiologic strain, analogous to puberty, and subnormal children may experience marked upsets of the nervous system and lowered general resistance at this time.

"Some Clinical Fallacies,"

Battle & Co.

ARMERVENOL IN ASTHMA

Since it is a demonstrable fact that improvement in diseases due to the presence of invading microorganisms is accompanied by an artificial or natural increase in the numbers of the white blood cells, I have, for several years, used this principle in the treatment of all maladies which seemed to be of infective origin, usually with satisfactory results.

Asthma has proved to be a condition or infection of very uncertain prognosis. For example, consider two cases, each giving a history of difficult breathing following attacks of influenza. Satisfactory results were quickly seen after the creation of an artificial leukocytosis with metaphen, mercurochrome or neoarsphenamine, in the first case; but in the second case the same procedure had no beneficial effect.

Due to the uncertain prognosis, the appearance of a case of asthma, in the office or in the clinic, is always viewed with regret. Early in September, 1927, an elderly patient came to me because of dyspnea that had followed an attack of influenza in February, 1927. The prolonged expiration could be heard several feet away from the patient. Physical examination confirmed the diagnosis.

She was told of the uncertainty of results in the application of the plan about to be tried, and was given 10 cc. of 1:1,000 metaphen, intravenously. She telephoned the next morning that she had had a comfortable night and felt better. When she was seen a week thereafter it was found that the difficult breathing had steadily increased and I could not see that anything had been gained, save that two or three nights had been made a bit more comfortable.

Thereupon she was told that the plan was a failure and that I could see no reason for giving her another injection. She said that even two or three better nights would make it worth while, so she was given 15 cc. of metaphen. The history of the next seven days was about as re-

counted of the first week. On this visit, further intravenous medication was refused, and she was told that her case was a failure for the white cells.

Then there came what has since proved a happy thought. A few weeks before this time my attention had been called to a colloidal preparation of copper, mercury and arsenic, called armervenol. Its intravenous use in the treatment of a few cases of eczema, coryza and acute and chronic bronchitis had proved its value for these infections; so, on the chance that its oral administration might keep the white cells above the normal count, she was ordered to take 15 drops three times a day.

Nothing more was heard of this case and it was considered another failure, when she walked into the office on October 15, with the report that she had had no further attacks of difficult breathing since beginning the "drops" and she was a bit exultant over her increase in weight, from 105 to 110 pounds.

Since this time the improvement has continued without any medicine, until December 19, when there was a return of the asthmatic breathing, accompanying coryza. A message by telephone has just informed me that there had been a rapid improvement in the difficult breathing and in the nasal infection with the fifteen drops of armervenol three times a day.

No counts of the white cells have been done in this case, but have been made on a control and on three other cases and in these, after from three to five days of fifteen drops of armervenol, three times a day, counts have shown increases in the white cells from 1,500 to 3,000 per cubic millimeter above the counts before the administration of the drug.

BURR FERGUSON, M.D.,

Comer Building,
Birmingham, Ala.

MILK A PROTECTION FOR MOTHER AND CHILD

There is every reason to believe that during the later months of pregnancy, at least, the need of the pregnant woman for calcium is one and one-half times as much, if not twice as much, as that of the non-pregnant woman. If there is an insufficiency of calcium in the food during pregnancy the growing fetus will take what it needs at the expense of the mother's organism, and the bones and teeth of the mother

may suffer. If an abundance of the green leafy vegetables is included in the daily food, a quart of milk a day will insure calcium enough for the baby's needs without calling on the mother's bones or teeth.

The complete nature of the combined proteins of milk, its richness in vitamin A, and the variety of its mineral salts, besides the abundance of calcium it affords, make milk a more important constituent of the diet during pregnancy than perhaps in any other period of life.

Millions are spent for tooth-repair work, to say nothing of the more important preventive dentistry, both during childhood and maturity, but little thought is given to the period when the foundation of the teeth is laid down—the prenatal period. It is well to remember that teeth are started in the first months (about the fiftieth day) after conception, that calcification of the first or temporary set is begun in the fifth month, that all the teeth of the first set are in the jaw at birth, and that by the sixth month after birth practically all the teeth, temporary and permanent, have been started, and the entire temporary set are enameled. The nutrition and metabolism of pregnancy seem even more important when it is realized that the temporary teeth are intended to function from the seventh month to the twelfth year, and that the first permanent molars are in some ways the most important teeth.

FOROTHY REED MENDENHALL, M.D.

Children's Bureau, at Washington, D. C.

TREATING PNEUMONIA

For 25 years I have had no reason to change my method for treating pneumonia, as the results have been especially satisfactory, even in elderly patients.

This is my method: Wash out the colon thoroughly with a solution of sodium bicarbonate or soapy water until the lower bowel is entirely empty; then give one ounce of a pure and reliable preparation of castor oil. If this does not clear the colon, give another dose of the same size.

If the temperature is above 100°F., I give 1/800 grain of aconitine hydrobromide every hour until the temperature falls to 100°. Where the case is well advanced before I see the patient, I have given this dose every hour for 36 hours before results were produced. Although such quantities might kill a healthy man, they

will be without danger in cases of pneumonia. If the patient is carefully watched, do not be afraid to give it to full physiologic effect. The patient will sweat profusely, which will rid the system of toxins and keep the blood in the skin and away from the lungs.

Apply a jacket of light, soft cotton to the entire chest, being careful that it is so applied as to prevent the entrance of cold air.

If the cough is dry and there is thoracic pain, apply some good rubefacient ointment every 8 hours, but be careful to disturb the patient as little as possible, as he needs rest.

For the diet, the patient should be fed 4 or 5 times in 24 hours, one of the best foods being: Cream of wheat, 1 cup; milk, 2 cups; water, 3 cups; cooked two hours in a double boiler, and the portions heated when served. Grape fruit or canned peaches or other canned fruit, rubbed through a sieve; grated pineapple; creamed spinach; soft boiled eggs and dipped toast with butter are also useful. Give no meat broths or meats until the temperature remains normal without medication. Plenty of cold water, lemonade or fruit sherbets may be allowed.

If the temperature falls to below normal without the aconitine, give 1/30 grain of strychnine sulphate, every hour, until it becomes normal. Two or 3 doses are usually sufficient.

Digitalis is an excellent remedy in certain heart diseases, but in pneumonia it raises the blood pressure and tires out the heart, so that when the stimulation of the fever is exhausted, that organ does not respond to the usual stimulants.

If the pneumonic process extends during the course of treatment, it means that your efforts have been relaxed too soon and the medication should be renewed. These simple measures will produce results in practically all cases.

LOUIS M. COON, M.D.,

Denison, Ia.

TREATING DRUG ADDICTION

In the October, 1927, number of CLINICAL MEDICINE AND SURGERY, on page 793, we published an abstract regarding the treatment of drug addiction, and not long afterward one of our readers called our attention to the fact that, while the remedies used were

mentioned, no dosages were given. A search of the literature revealed the fact that Dr. Lambert's original treatment was outlined in the J.A.M.A. for February 18, 1911. The substance, as it relates to dosage, of that article being as follows:

"The belladonna mixture consists of two parts of 15-percent tincture of belladonna and one part each of the fluid extracts of hyoscyamus and xanthoxylum."

The first amount of morphine given the patient is in three divided doses at half hour intervals, the whole equalling two-thirds of the total daily 24-hour dose of morphine or opium to which he has been accustomed. The second dosage is 4/9ths of this total.

At the same time with the morphine, 6 drops (from a medicine dropper) of the belladonna mixture is given in capsules. This mixture, in 6-drop doses, is given every hour for six hours and then increased by 2 drops until 16 drops are taken, and then continued at this dosage, diminished if necessary, according to belladonna symptoms.

FAIRY TALES OF PROCTOLOGY "Ribbon Like Stools"

Many, many years ago a doctor saw a case of cancer of the rectum which he did not diagnose as "piles." Of course, you are not expected to believe all of this fairy tale, so that lets in this first statement. At any rate, our ancestral brother medico correctly recognized the neoplastic nature of the growth and a new disease was described. In order to impress his contemporaries with the fact that he was at least on speaking terms with the new disease, it became necessary for our medical forbear to state the "cardinal symptoms" of his find.

Constipation alternating with diarrhea was a rather dull item; bleeding from the rectum sounded a little more lively, but since hemorrhoids had a prior claim on this symptom the thought of using it had to be abandoned. So closely was this custom observed that, to this very day, bleeding from the rectum is regarded as belonging, according to law, justice and equity, to but one disease; namely, hemorrhoids. It was in this way that Doc Quixote found himself sorely pressed for a new lance to shiver against the windmill of medical opinion.

However, our crafty knight here displayed that sparkling ingenuity which has ever since endeared him to all those who care not at all for truth. Why not elect "ribbon like stools" as the pathognomonic symptom of rectal cancer? Something novel, puzzling, vague; why not? Just the very thing!

And so it was and has been thenceforth! What though a dozen other conditions can cause this symptom; what though the size of the stool is governed chiefly by the tonicity of the sphincter; what though no such symptom is observed in many cases of real cancer; why bother with the facts in the case? The *idea* is good and that alone is enough.

Of course, it all would be different if the practice of medicine were a science and it were necessary to differentiate the various causes of spastic sphincter, such as fissure in ano, inflamed hemorrhoids or proctitis, or to differentiate the causes of an organic stricture of the rectum, other than that due to cancer. But, of course, all this would require one to examine the rectum with a rectoscope—and, perish the thought of such heresy! The rectum and colon should *never* be examined with a rectosigmoidoscope, which permits easy, painless and complete examination of the colon and rectum. Moreover, every case of ribbon-like stools signifies cancer and no questions should be asked! Believe this and more will follow.

J. F. MONTAGUE, M.D., F.A.C.S.,

Rectal Clinic, University and Bellevue Medical College, New York City.

[This is the first of a series of brief articles under the general title of "Fairy Tales of Proctology," which Dr. Montague has promised to write for us. We are sure you will enjoy them.

The Doctor is a recognized authority in his specialty, the inventor of several very practical instruments and procedures, and writes in a keen and breezy style which is refreshing and also drives his points home.

The second article of this series will appear before long.—Ed.]

VINCENT'S ANGINA

Judging from the paucity of literature on the subject of Vincent's angina, one is apt to infer that the infection is a comparatively rare one. This is decidedly

erroneous. If the general practitioner will make smears in all cases of stomatitis, gingivitis, ulcers of the mouth, and ulcerative or exudative inflammation of the tonsils, he will be surprised at the number of infections due to the microorganism of Vincent's angina.

This organism appears under the microscope in two forms: As a bacillus, long and spindle shaped; and as a spirillum or spirochete with three to five waves, both forms being generally regarded as different stages in its development.

Where the buccal mucous membrane is affected, the gums are swollen and tender, often bleeding, have a nauseous odor, and may have a peculiar mercurochrome-like color. In addition the face is sometimes swollen.

The typical Vincent's angina throat, usually unilateral, presents a dirty, foul-smelling, greenish membrane on the tonsil. This is friable and can be rubbed off, usually causing some bleeding.

The odor is similar to that of diphtheria, as is also the color of the membrane, but this is not so adherent as the diphtheritic exudate and the patient has not the toxic symptoms associated with the Klebs-Loeffler infection. If, on microscopic examination of the smear, a pure culture is not found, there may be a combined infection, and it is well to culture for diphtheria organisms also.

Regarding the treatment of Vincent's angina, many authorities recommend the use of arsphenamine, locally and intravenously, but cures are quickly obtained with solutions of silver nitrate, 3 to 5 percent for the gums, and 10 percent for the tonsils. It is advisable to remove the exudate from the tonsil before applying the solution. Usually two applications are sufficient.

R. STEWART MACARTHUR, M.D.
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HEALTH CONSULTATIONS AND ETHICAL ADVERTISING*

The medical profession itself is in part responsible for the growth of quackery and of antimedical cults in the United States. From thousands of letters received by insurance companies and other national agencies from people all over the country

*Extracts from a speech before the Michigan Conference of Social Work at Battle Creek, Mich., September 16, 1927.

seeking health advice and medical guidance, it is clear that the public wants protection against quackery and fraud. Many who write for advice suspect that the advertised cures are fakes, but don't know where to turn for safe and sound medical counsel and treatment.

Many of these people are new in their communities. They do not feel certain that they know the difference between a regular doctor and a so-called "doctor" of one of the many flourishing varieties of quackery. They may want a specialist, or think they want one, and do not know how to secure one. At present, in most communities, there is no responsible agency to which they may turn. Hence the flood of more or less futile inquiries to national offices.

The people throughout the country not only want to be protected against quackery, but they are willing to accept and actively desire direction to safe and helpful medical and health services and facilities. In seeking reliable services, however, many go wrong and get into blind alleys, through lack of guidance. They are so often fooled by quackery in the guise of medicine that they frequently lose faith in the medical profession as a whole.

To an increasing extent the people want positive health guidance. Health Departments and other agencies have told them to see the doctor regularly in order that he may help them keep well. They have been told to go to the doctor for a thorough medical and health examination once a year. They want advice as to how to live and how to prevent disease.

Now, the doctor has been primarily trained to treat the sick and he has hitherto not been very much interested in well people. Consequently an increasing number of people who are seeking health advice from physicians are going away from the doctor's office disappointed; because the doctor is not yet prepared to give the kind of service that is being sought. Many doctors, instead of giving a thorough medical examination, for which most people are prepared to pay a reasonable fee, are inclined to slap the patient on the back, tell him he is O.K., and not to worry. That's "old stuff" and won't go much longer. It's another reason why many of these people turn to so-called medical institutes run on a fake advertising basis.

The medical profession is in part respon-

sible for the development of quackery, first, because its members are not yet ready to meet the increasing demand for personal health service. This situation can be remedied only by teaching more preventive medicine in the medical schools and the development of postgraduate education for doctors, carried out through county medical societies, etc.

Furthermore, there exists at the present time, practically no machinery in local communities for giving medical guidance to those in need of it. To the thousands of letters which these people write to national agencies every year, the only reasonable answer is, "See your doctor." But they haven't any particular doctor and don't know how to get a *real* one. The Health Department and social agencies can help some of these people. However, many of them want to know where to get a thorough medical examination; how and when to take insulin for diabetes; what is a good diet for Bright's Disease; how to find a reliable physician; where to get a skin or other specialists; etc.

To meet these needs there must be established, in most communities, a Medical Guidance Bureau where its citizens can secure the help needed. If such a bureau were to be run under unprejudiced medical auspices, with the cooperation of the Health Department and social agencies, and were to be properly advertised in the community, it would perform a most valuable service. It would combat the development of quack medicine; it would direct individuals to sound medical service; it would stimulate doctors to meet the demands for health advice on the part of the people; it would increase the work of the medical profession, and would open up to that profession the great and growing field of the private practice of preventive medicine.

DONALD B. ARMSTRONG, M.D.,
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WHY DO SOME CHILDREN STEAL?

In some cases, stealing is a child's way of "getting even." Mary was an apathetic but friendly little girl who vigorously denied, even before the subject was broached, the thefts of which she was accused. She did not have to be prompted to discuss her interest, her play life, and the movies which she occasionally attended. She said that

she hated dolls, liked to play ball, and enjoyed the play life on the street. Mary volunteered no complaint of her home life, but it was not difficult to see that she was far from happy. Just before the interview was ended the child returned to the matter of stealing, stating quite openly and frankly that she had stolen. Without being questioned she confided, "Nobody likes me. I don't know why. The girls don't like me—they knock me down and tease me. I stole only from the people who teased me and from those I don't like."

Stealing was Mary's way of "getting even" with those who had hurt her by their teasing and their ridicule.

Revenge and jealousy are not uncommon motives for stealing, especially with girls, even up to the college age. A girl of 16 years was brought to court on a charge of breaking and entering. Investigation showed that on three occasions she had gone to the house of her best friend and stolen wearing apparel, skate, and a ring, all of which she carefully hid away and made no attempt to use or sell. A rather long, detailed story of the case revealed the fact that, in spite of her extreme fondness for her girl friend, there were times when she became intensely jealous of her, especially when the other girl appeared in new clothes such as her own parents could not afford to buy. It was after such periods of jealousy that she committed the thefts.

One must here assume that jealousy was a strong personality trait in the mental make-up of the girl, and it is extremely doubtful whether any treatment would completely eradicate it at her age. It is important, however, to give such an individual a better insight into her personality make-up so that she can battle with her handicaps openly.

D. A. THOM, M.D.,

Boston, Mass.

APPENDICITIS (An Illustrative Case)

Miss K. H., nineteen years of age, awakened at 6 A.M., November 26, after sleeping soundly all night, with pain in right iliac region. I was called at 8:30 A.M. and found tenderness at McBurney's point, with a tense and rigid right rectus muscle. I pronounced the condition appendicitis, prescribing an icebag and absolute

abstinence from food and medicine. As her pulse was 85 and temperature only 101°F. and pain was not severe, I felt hopeful that it was a slight attack only.

I called again at 11:30 A.M. and found her temperature 102°, pulse 90, and the pain more severe, so I continued treatment as before.

I called again at 3 P.M. and found the symptoms slightly aggravated, with some indescribable condition that convinced me that the sooner something was done the better; accordingly she was moved to the hospital and, at 6:30 P.M., with pulse 128 and temperature 104.5°, she was operated upon, with the removal of an appendix the size of a small adult thumb, filled with pus and so tense that, when incised after removal, the contents squirted several feet.

I am aware of skepticism, among those who are experienced, as to the sudden pus cases being the first attack, but I have related the case just as it occurred and, in my opinion, it was the first attack and had been in progress longer than was apparent, but, owing to the profound toxemia, the patient was insensible of its presence.

If I had waited for chills and high fever before diagnosing appendicitis the patient would have died; if I had given a cathartic and waited for intestinal antiseptics to cure her, she would have succumbed; had I masked the symptoms with an opiate until rupture had taken place, as there was no protective exudate, the results would have been fatal; and had I postponed the operation another twelve hours she would probably have died.

I wish to state, with all the emphasis possible, that the errors in diagnosis and treatment above enumerated mean practically certain death, in severe, acute cases and in a great many of the others, the mortality varying as the severity.

It is conceded that 85 percent of cases of appendicitis recover, after prolonged suffering and expense. But this would be small consolation to the friends and relatives of the other 15 percent who, if improperly treated, would die. The trouble is no one can tell certainly who is in the 15 percent list in time to classify them.

JAMES A. LARRABEE, M.D.,

Barnard, Mo.

Seldom does one "lose one's health." It is usually thrown away.—Dr. H. N. Bundesen.

ANNUAL HEALTH AUDIT

If you are not one of the doctors referred to below, you will smile at the following letter reproduced from the original in our files.

"Gentlemen:

"The *Tribune*, October 3, quoting from the GORGAS MEMORIAL article:

"The education of the American people to the necessity of an annual medical examination is one of the purposes of the Memorial."

"Let me respectfully suggest that they commence this education by first educating the *physicians* to the purpose. I believe in it. I believe it will do immeasurable good. I have tried earnestly to act upon the idea. I have gone to five reputable physicians and in each case the following comedy (or tragedy) resulted, almost word for word:

"Me: 'Doctor, I want to get looked over!'

"Dr: 'What's the matter with you?'

"Me: 'Nothing, I hope. I just want an examination. I like to have one every year or so.'

"Dr: (looks mystified) 'Yes, but what's the matter? Headaches? Bowels all right?'

"Me: 'Nothing. No. Yes. Feel fine. But just thump me over and make sure all is as well as it seems.'

"Dr: 'Well, but—Let's see your tongue.' (Looks at tongue; feels pulse; expression becomes: 'W h y-bother-me-

I'm-a-busy-man-lots-of-patients-waiting.')

'Why, you're all right. Nothing wrong that I can see.'

"Me: 'I hope so, but prove it. I want to get looked over carefully.'

"Dr: 'Why, I tell you, there's nothing the matter with you. Sound as an ox. Don't eat, drink, smoke, chew, or swear. Anything else?' (Expression is: 'Get-the-h---out-of-here-I'm-busy-you-d---hypocondriac.')

"Me: 'All right, Doc—here's your two dollars. Goodbye.'

"If any member of the GORGAS MEMORIAL thinks this is an inaccurate or unfair description, let him disguise himself as a layman and go to any general practitioner and ask for a physical examination. He will be humiliated and made to feel very foolish because he will find the doctor doesn't understand that a 'well' patient may be a sick patient. He will find the average physician doesn't know what it's all about, and is impatient and annoyed at his inexplicable visit.

"Yours sincerely, X Y Z—Millville, Ark., (The physicians were located, however, in Indianapolis, Milwaukee and Chicago)."

Let us hope that this man's experience was an exceptional one. The drift is strong to the ANNUAL HEALTH AUDIT,—for the sick or well—and it behooves us all to be prepared.

Cordially yours,

GORGAS MEMORIAL, by
Franklin Martin, M.D., President

The Leisure Hour

Hymn to Light and the Sun

Part I

The Blind Man

Lord God! You gave me the light of the sun
And I saw life shining
Like a river in the night of the midsummer sun*.
Lord God! Lord God!
You quenched my light and You wiped out all.
The years became long

And all things were colder than cold,
As the darkness sank
Silently, heavily, heavily, deeply
Day by day.
Where is the shimmering midsummer night?
Where are the waters of color and light?
And I, where am I?

Lord God! You gave me the light of the sun
And the light laughed.
You gave, and took it away.
But let me once again know
How life can smile—
Let me see!
Let me see!
O, Lord God!

*Translated from the Swedish of Dr. Ernst V. Knapé,
by Miriam Heideman Krarup.*

*The land of the midnight sun is Finland, where the sun does not set at all on Midsummer Day.



A Hunting Day

TWO grey squirrels up on a bluff are fighting a big monkey with a head like a deer, and you sit down below pointing your gun and pulling the trigger, but the thing misses fire all the time. One of the squirrels shouts at you to throw a rock at the monkey, and then he bites him on the nose. The monkey screams out "Police," jumps down, and runs away. As he passes you, he looks around and you see that he has a face like Andrew the guide—then—

"Break-f-a-s-t"

The cookees' call brings you back from dreamland and Pardner helps the process by an elbow jab in the ribs.

"Wake up, you lazy tramp, and stop that groaning. Your turn to light the stove."

You awake to the chill, dark reality of a cold morning with the tent like the inside of an ice-box. Climbing out of the bunk is like creeping into the river. A scramble for the stove—a match to a handful of birch-bark, and the flames begin to crackle a grateful heat.

The business of a hunting day begins by pulling on your six pairs of woolen socks. How different the real dress of the woods to the picture dress of a magazine illustration. Every man to his fancy, but all agree on essentials—and essentials are plenty of thick, wool socks, a pair of larrigans (Maine hunting shoes) and plenty of wool in whatever clothes you wear. The fancy differs according to the man. The Judge, for instance, insists on wearing one of those red-topped caps. He is so big he is afraid that without it some short-sighted hunter would mistake him for a bull moose. With it he looks like a giant woodpecker. Sam, the D'Artagnan of the woods, has a camouflage suit, speckled green, white and grey. He claims that with it he can creep up and pull a deer's tail. John has a reindeer shirt—he claims it sheds wind, snow, or water, heats like a stove, weighs like a feather. Pardner has a touch of military olive drab to hint at his soldier days.

Breakfast in the cook shack is raw feeding—no toying with toast or tickling an egg top. Oatmeal in a wash basin, beans and hunks of deer liver. Hard-boiled coffee and soft friend flapjacks.

Then each man to his trail, and a warning from the guide to get back before dark.

The country around is big enough to give each a fat slice of hunting ground, and each, like a gambler, plays a favorite bet.

"Where are you going today—?"

"Oh, up the same old ridge."

And you tramp off, scrunching the morning snow that covers your yesterday's trail. It is chilly at first, but soon the exercise sends the blood pumping warmth, and you feel comfortably hot as you hedgehog your way under blow-downs and through swamps. Along up the rise of hill a little stream gurgles and thrills among the rocks and cedars. Soon you are into the water. Engineer Beaver has a dam that spreads the stream into a pond, and you slop through the flowage with a suspicion of cuss to your admiration of the long-toothed one's industry.

Across the beaver dam and then up the ridge, following your own faint trail through the naked raspberry bushes. The warming sun softens the white frosting on the green spruce and cedar boughs, so as you brush past them blobs of snow fall. You step forward quietly now—the safety off your gun, and your index finger handy to the trigger. This is a beechnut ridge, and any moment a spot of tawny grey, a flicker of a white tail and a quick shot. Yesterday you saw a bear track here. Old Bruin evidently filling up on beechnuts before the long winter sleep.

You watch for deer tracks, and soon are on one of the faint trails the silent ones travel through the thick growth. You see a fresh track—big, heart-shaped imprints in the softening crust. Then droppings and a barked sapling. A buck has passed this way within the hour, sharpening his antlers as he proudly stepped on his love quest.

You move forward now, almost by inches, feeling for treacherous stick or twig before laying your weight on the forward foot. Where the thick moss laps out from a log or trunk you step in a sound-deadening carpet. The track leads through a cedar swamp, before entering which you glance at your compass, for of experience you know the green blindness of such. You wonder that a deer with wide-reaching antlers can get through such a tangle at all—a very network of green branches, spongy wet underfoot—but there lie the

tracks. To get through you have to discard some of your valued silence, the cedars clutch and hold at you as if they would detain you in this green, aromatic pit. Through at last, sweating with the exertion, and mud to the top of your larri-gans. Out into a clearer glade, an excellent place for a shot, ahead of you a little hump of ridge with a criss-cross of big blow-downs.

Now is a good time to do some stiller still hunting and you select a big trunk, lying against a rock where the color matches up somewhat with your clothes. Here you squat comfortably but damply on some soft moss. The wet trickle from the cedar swamps pours over a couple of stones with a splash and gurgle that tinctures the silence.

Still as a stone you sit, studying every rock, stump and shadow, your rifle across your knees for a quick lift to the shoulder. A flutter of wings and a bevy of little birds are in a bush beside you. Saucy little fellows, chickadees. You know they are discussing you.

Chickadee dee dee
Chickadee dee dee
Who is he he he
Come and see see see
Chickadee dee dee.

A tiny rustle near your foot and a mouse emerges—a brown lad with a short tail. You never see a dropped antler in the woods, these little fellows eat them up. He goes in jerky runs, a scraggly trail about you. Once he brushes your toe, then off on his little quest under the log.

Ah, from the corner of your eye you see another visitor who has come to investigate you. Brother Red Squirrel. He is on the log a few feet away from you, sitting up and staring at you from bright eyes, pulsing and throbbing with virility. By starts he gets nearer for he is curious. You turn your head an inch to watch him better, and whirr—he is off and away. Up the trunk of a beech tree, and then he tells you what he thinks of you. He barks and scolds and dares you to follow him. What bad language—he will wake the whole woods up soon if he doesn't stop.

Well, the argument is one-sided and after a while tires him, so he whisks off on his business of gathering in the winter store of beechnuts, and silence settles down again.

You have been sitting still so long that you are stiffening, and considering the

advisability of moving on, when there is a crackle of a dead branch off to your right. The noise startles you almost as if it had been a shot. What is it? Some other hunter—or a deer? You turn your head and swing your rifle slowly around. Ah, a flicker of a white tail, and a glimpse of an antlered head disappearing into the bush. Not your chance for a shot, he saw you move. Now you must use your hunting strategy. Remember what Sam told you. A deer is always curious and will try to get the wind of you so that he can smell you. This fellow wasn't frightened, and was up wind from you. He is likely to circle until down wind he can get your scent.

You arise and get forward so carefully that you can't even hear yourself move, every nerve is on the alert now, every tree stump on the ridge like a deer head. Forward and to the left there is a silent movement, you bring up the rifle—it's a deer, but you don't shoot for it is a doe. This is the lady Mr. Buck is after, and you are almost sure of a shot. You step beside a tree, half behind it, and watch.

Some of the stumps and branches on the ridge almost hypnotize you into believing that they are deer, but you have watched them so long you know them. It is a mistake to focus your eyes on any one spot now. He may appear anywhere, and up and down you watch, when—there, looking right at you over that blow-down is the antlered head. Just near enough to distinguish it. A forty-yard shot. You bring the rifle up steadily and when your front sight registers on the thickness of his neck—the trigger squeeze.

No need for caution now, you ram another cartridge into the chamber as you start to run and stumble up the ridge. You can't tell if he is hit. You didn't see him run, and after the shot his head disappeared. You hope he is hit right if at all and that the blood trail will be enough to track him by.

There he is right behind the log. Dropped in his tracks. A noble buck, eight points, and over a hundred and twenty pounds if an ounce. He gives a few convulsive kicks as you come up to him, but the big bullet has cut the nerves and arteries in his neck and the poor fellow is through. He coughs a few times and then breathes his last, looking reproach at you from his soft, big brown eyes.

First the primitive instinct, and raising your arms on high you shout at the tree tops. You have turned the trick at man's oldest calling—meat hunting. Then you sober down as you watch the graceful wild thing you have ended, but you realize that perhaps you have saved the poor fellow from starving to death in the deep snows of winter. This was the quickest and best death he could have. Then to the bloody business of dressing him out.

You have him cleaned out and hanging from a bent sapling when the moose birds descend to the scene of the kill. Swift and graceful, they seem to know when a shot is a miss or a hit, and when to gather to the feast,—and here are three of them already, grey-blue with white facings, watching you from the nearby boughs as you rub the blood from your hands and knife, with moss and snow.

Then you step back to admire your deer. How well that head will look in your den, and how good that meat will taste back in the city—but a snowflake gently lights on your nose and hints that it is getting late and beginning to snow. You will have to step lively to make the camp before dark.

You step down the ridge, slashing an odd blaze now and then for fear of losing the treasure that hangs up there in the gathering darkness—the quarry of many days' creeping, tracking and crouching in the Maine woods.

HARRY C. PHIBBS.

A physician in Minnesota, was asked by the bereaved widow to take care of inserting a death notice of the late lamented in the weekly local gazette. "How much do you charge?" he asked the editor.

"Dollar and a half an inch."

"Holy Smoke! He was six feet four!" mused the doctor, as he began to calculate the expense.

AN EMERGENCY

The victim had been properly patched up, both broken legs set, six stitches under the chin, plaster cast around the chest, and a small silver inset in the skull.

"By the way, doc," he whispered, as the weary surgeon gave one last proud look at his handiwork, "I don't know just when

I'm going to be able to pay you for all this. I've got a few hundred laid by in the bank, but to tell you the truth, I'm saving that in case of an emergency."—*Medical Economics*.

A SPINE SONG

Call a doctor in the night time
If your pulse is acting queer,
For with him it's just the right time,
To remove your leg or ear.

Chorus

For it's always fair weather
When specialists get together,
With your lungs full of ether,
And your family full of fear.

Oh, it's always fair weather,
When specialists get together,
With a spine on the table,
And a good saw ringing clear.

—*Med. Herald & Physiotherapist*.

A man went into a store in Oswego one day and said, "Say, I want a bottle of George Washington cough syrup."

"What?" asked the clerk. "We haven't any syrup by that name."

"Yes, you have, too!" exclaimed the customer.

"I tell you we haven't. We've got Glesseo, Father John's, White Pine, Flaxseed, Menthol, Wild Cherry—"

"Hold on! That's it. I knew it had something to do with George Washington!"

—*Patchwork*.

HIS FEARS REALIZED

A Georgia statesman tells the story of an aged negro who saw an extraordinary-looking instrument in the shop of an optician. He gazed in open-mouthed wonder, and, turning to the optician, inquired:

"What is it, boss?"

"That," replied the optician, "is an ophthalmometer."

"Sho," muttered the other, his eye still fastened on the curious-looking thing on the counter, as he backed out, "sho, dat's what I was afeared it was!"—*Christian Register*.

Diagnostic Pointers

BACTERIOLOGY OF TONSILS

In a large series of excised, chronically diseased tonsils, a bacteriologic investigation showed that the organisms most frequently found were: staphylococcus aureus, 33 percent; M. catarrhalis, 34 percent; and the pneumococcus, 54 percent. The rather low incidence of streptococci was surprising—only 6.4 percent.—DRS. R. A. KILDUFFE and W. W. HERSOHN, in *J. Lab. and Clin. Med.*, July, 1927.

SYPHILITIC INFECTION OF PHYSICIANS

Of 22 patients suffering from accidentally acquired syphilis, 8 were physicians. In all 8 cases the infection was acquired through a gynecologic or obstetric examination, and the site of the initial lesion was the finger tip or the forearm. In making such examinations physicians should always wear rubber gloves and be especially careful in attending to even the slightest injury on the hand or forearm.—DR. OSCAR BERGHAUSEN, in *Am. J. Syphilis*, April, 1927.

PUS CELLS IN URINE

The presence in the centrifuged sediment of catheterized urine of more than a small number of leukocytes per high power microscopic field indicates infection, acute or chronic, somewhere in the urinary tract.—DR. I. H. NOYES, in *Urol. & Cutan. Rev.*, July, 1927.

DIAGNOSIS OF PERNICIOUS ANEMIA

A diagnosis of pernicious anemia should never be made upon the blood picture alone, but only after long and careful study of the case. No such diagnosis is justified unless the patient shows *achylia gastrica* and definite remissions.—DR. THEODORE TIEKEN, of Chicago.

INFLAMMATION OF UMBILICAL CORD

The study of 1,000 umbilical cords showed that inflammation occurred frequently, even where syphilis was ruled out; and that in

known syphilitic cases the cord was rarely inflamed. In the majority of cases the evidence pointed to bacterial infection.

Inflammation of the umbilical cord is of no value in the diagnosis of fetal syphilis.—DR. R. S. SIDDALL, Detroit, in *Am. J. Obst. & Gynec.*, Aug., 1927.

SCURVY

Scurvy is more common than most people believe. When a child or adult, showing no fever, is asthenic; anemic; subject to hemorrhages under the skin or mucous membranes and to easy bruising; and has a sore mouth, study the diet carefully. A diet of white flour, white sugar and other highly refined foods, with insufficient fruit and vegetables, may lead to scurvy, even in the wealthiest families.—DR. CHARLES E. BLANCHARD, in *Bul. Amb. Proct.*, Jan., 1927.

LIVER DISEASE OR OBSTRUCTIVE JAUNDICE

In liver disease, bile salts are absent from the blood: In obstructive jaundice all bile elements are present in their normal relations.

If a little bile trickles through the obstruction, urobilinogen appears in the urine, which must be tested while warm and fresh to determine its presence.—DR. S. S. BERGER, of Cleveland, O.

SPASTIC PARALYSES

Not all spastic paralyses are due to syphilis, and many of them, if carefully studied, will be found amenable to relief or cure by surgery: For instance, a slowly progressive spastic paralysis, *below a definite level*, is probably due to a spinal cord tumor which can be removed.—DR. A. W. ADSON, of the Mayo Clinic.

SPRAINS AND FRACTURES

In all contusions and sprains, examine carefully for bone injuries. Ligaments have greater tensile strength than the bony prominences to which they are attached and fractures can be demonstrated in most cases.—DR. ISIDORE COHN, New Orleans, La.

Current Medical Literature

BISMUTH ARSPHENAMINE SULPHONATE IN SYPHILIS

Drs. J. H. Stokes and S. O. Chalmers, of Philadelphia, in *J.A.M.A.*, October 29, 1927, report their results with bismuth arspenamine sulphonate in the treatment of syphilis, in the Syphilis Clinic of the University of Philadelphia Hospital, where 4,118 injections were given to 204 patients in the course of 21 months, besides being used for a number of private patients. The synthetic product prepared by Prof. Geo. W. Raiziss, of the D. R. L. Laboratories, was used.

The authors consider that the effectiveness and availability of bismuth arspenamine sulphonate in early syphilis should give it a high value. Its technic of administration is simple for any one acquainted with the principles of intramuscular injections. The precedents of arspenamine technic must be discarded in its dosage, in the frequency of injection and in the duration of the course; two injections a week, of 0.2 Gm. each, and four courses of not less than twenty injections each are recommended for the average adult, with a total of from 40 to 60 injections. Rest intervals should be short (two weeks), or absent, between courses, in early cases.

The ultimate effect of this drug, unaided, in early syphilis, appears to be equal if not superior, so far as can now be determined, to that of modern intensive combined treatment with other drugs. The ultimate proportion of serologic reversal and the high proportion of negative spinal fluids is certainly unusual and gratifying. The toxicity of the drug is very low and reactions comparatively benign and controllable. The serious forms of complications—dermatitis, hepatic injury, aleukemia hemorrhagica, etc., have not appeared. Nitritoid crises occurring occasionally are controllable by the use of epinephrin and atropine. Such crises were observed only three times in 4,200 injections.

The drug is well borne by children in adult dosage, after five years of age.

The absence of therapeutic shock and paradoxical effects in vital structures makes the drug valuable in the treatment of cardiovascular syphilis, in which its record with the authors is excellent.

The effect in Wassermann-fast syphilis is good, though the permanence of these results cannot yet be judged. In entrenched neuro-syphilis, so far as this series goes, it is less effective than established methods of treatment.

The authors feel from their experience that bismuth arspenamine sulphonate shows promise of being a distinct advance

tage in syphilotherapy exactly where such an advance is needed—in the prevention of late syphilis by the simplification and increased effectiveness of the treatment of early syphilis.

In discussion, Dr. Paul S. O'Leary, of Rochester, Minnesota, also spoke of his excellent results in a smaller series of cases of primary and secondary syphilis and in patients with persistently positive blood Wassermann tests. His impression is that arspenamine, given intramuscularly, has a higher therapeutic index than when given intravenously.

COCAINE AND EPHEDRINE

It is known that epinephrin and cocaine are synergistic in their actions on blood-pressure. Moderate amounts of epinephrin markedly increase the poisonous effects of cocaine.

Ephedrine possesses most of the properties of epinephrin.

From experimental work done by Dr. E. L. Ross, of Northwestern University Medical School, reported in *Arch. Otolaryngol.*, June, 1927, he has established that in dogs, ephedrine and cocaine do not act synergistically in raising the blood-pressure like epinephrin and cocaine; also, ephedrine does not increase but *decreases* the toxicity of cocaine.

MEDICAL TREATMENT OF GASTRIC ULCER

Present day accuracy in the diagnosis of gastric ulcer without operation is over 90 percent, according to Dr. Franklin W. White, of Boston, in *Am. J. M. Sc.*, May, 1927. This accuracy of modern diagnosis brings with it the responsibility for earlier and better treatment.

In the medical treatment, a bland diet is essential. In the first week, the strict Lenhart diet of milk and eggs may be varied with gruels and cream. One- or two-hourly feedings are given, beginning with 1 ounce and increasing up to 3 or 4 ounces by the third week, or 2 ounces of beef, chicken or lamb may be added, and potatoes with vegetables by the fourth week. No raw fruit or vegetables are allowed.

A week or two in bed at the beginning of treatment is desirable.

Alkalies are not essential, but they simplify treatment, especially at first. Dr. White uses them regularly in the form of the Sippy powders (sod. bicarb. and magnesium oxide) given alternately in 20- to

30-grain doses, midway between feedings; but an excess of alkali may cause gastric irritation or even an actual toxemia. Atropine is useful to relax spasms and bismuth salts have a remarkable quality of covering a large surface of mucous membrane and are of value as a protective in ulcer. The use of tobacco should be cut very low or omitted, for some months at least.

Relapses occur because both physician and patient become lax in pursuing the dietary and other restrictions.

The author gives these statistics: of 51 gastric ulcers, 9 were operated upon at once and 41 put on medical treatment. There is every reason to believe that from 90 to 95 percent of these were actual ulcers. The patients have been followed for 3 to 5 years. More than one-third of the gastric ulcer patients are well; less than one-third better; and about one-fourth were operated upon after unsuccessful medical treatment.

Of a series of 135 duodenal ulcers treated in an identical way 59.2 percent are well and 22.2 percent better.

The author thinks that a combined medical and surgical routine is the only logical one; medical for the large group of younger, milder, uncomplicated cases; surgical for the chronic, serious resistant cases.

TISSUE RESPIRATION AND THE ENDOCRINES

Dr. C. E. de M. Sajous is recognized as the father of endocrinology in the United States, and any pronouncement of his deserves attention.

In *M. J. & Record* for August 3, 1927, he contributes a scholarly article on the thermogenic function of the endocrines, in which he summarizes his conclusions as follows:

"1.—*Tissue respiration*, or thermogenesis, is the fundamental function of the endocrine organs. Its purpose is to supply the heat energy required by all cells to raise the activity of the tissue enzymes sufficiently to enable them to sustain both phases of metabolism; i.e., anabolism and catabolism.

"2.—*Fever* is due to overactivity of the endocrine organs; any increased liberation of heat energy above normal (98.6°F.), having for its purpose to enhance the activity of the tissue enzymes sufficiently to enable them to break down pathogenic substances, such as toxic wastes, bacteria, toxins, organic poisons, etc. It is a defensive function up to a certain temperature limit of about 104.5°F.

"*Heliotherapy*, and the incomparably inferior sources of heat: hot air, diathermy, the hot water bag, etc., imitate Nature by increasing the antitoxic and bactericidal activity of the defensive enzymes in the tissues.

"3.—When the endocrine organs, owing to senile atrophy, local destructive lesions, sclerotic areas, etc., are unable to liberate

enough heat energy to evoke a febrile reaction sufficient to raise the activity of the enzymes to the bactericidal or antitoxic efficiency required to check the infection or toxemia present, recovery of the patient is unlikely.

"A fatal ending may be prevented in many instances by administering epinephrin intramuscularly, in three- to five-minim doses of the 1:1000 solution at intervals, or antitoxins, serums (specific, if available, or nonspecific), all such being rich in endocrine products, both thermogenic and defensive. Schatz's distilled water method, in which twenty to thirty minims, at most, is injected intravenously, by causing hemolysis of a fixed number of red corpuscles, suddenly liberates the needed pabula, lecithin, cholesterol and adrenoxidase, and may prove preventive if used earlier in the case; i.e., before the erythrocytes are depleted of their functional contents.

"4.—When the endocrine organs become exhausted in the course of, or towards the close of an acute or chronic infection, they are increasingly unable to carry on their defensive functions until death occurs.

"Even when death is near, the injection of epinephrin, a few minims (according to age) of 1:1000 solution in a syringe of or more of saline solution, renewed at intervals, will often save life.

"5.—Pathogenic organisms and certain other harmful agents which provoke a febrile reaction are not, in most instances, the direct cause of disease. When the temperature exceeds the defensive limit (104.5°F.), the internal temperature in many organs, the liver especially, the proteolytic activity of the defensive enzymes becomes such as to cause destruction of the red corpuscles, thus accounting for *hemolysis*.

"Removal of any source of toxemia, general or focal, is essential. Cholesterol in three-grain doses, three times a day, is indicated to reduce the thermogenic activity of the cellular lecithin, and arsenic to inhibit the functional activity of the whole endocrine system. The ice-water bag and other measures to favor heat dissipation assist the medicinal treatment.

"6.—Where virulent bacteria or violent poisons evoke a still higher internal temperature, the tissues themselves, such as the hepatic or pulmonary parenchyma, the cardiac valves, the internal and median coats of arteries, the endocardium, pleura, peritoneum, the spinal cord, etc., are subjected to hydrolysis by the tissue enzymes, thus explaining *autolysis*. In the spinal cord, autolysis is the cause of the destructive lesions which eventually cause various forms of muscular paralysis.

"Besides the measures indicated for hemolysis, the abnormal viscosity of the blood in acute infections should be prevented by saline solution hypodermoclysis. In three to ten minutes the desired result will be obtained and cause a transfer of the excess of plasma into the lymphatic system. The viscosity of the blood being

reduced, its autolytic power will be correspondingly diminished.

"7.—The brain does not so readily yield to autolysis as do other tissues, the excitement or mania of the intoxication psychoses being due to excessive thermogenesis in the brain cells, and not to a direct action of the pathogenic agent on these cells. Conversely, the depressive psychoses, or melancholia, are due to deficient thermogenesis in the brain cells.

"A diligent search for any source of toxemia, focal infections in particular, should be made in all cases of insanity. The intestinal tract and the genital organs of women are frequent causes of mania. In the depressive psychoses, active organotherapy calculated to enhance thermogenesis is often efficient. In cases of long duration, both manic and depressive, destructive lesions of the brain cells may prevent recovery.

"8.—The kidneys form part of the endocrine system, but as excretory organs of the waste products of thermogenesis in all parts of the body. Their functional activity is governed by the pituitarionuclear system at the base of the brain, which also governs the functions of all endocrine organs.

"Renal diseases are often due to the excessive elimination of wastes in the course of infections. Polyuria is usually due to dilatation of the renal arterioles and may be controlled by the combined use of the posterior pituitary 1/10 grain (0.0065 Gm.)—a pharmacologic product rich in phospholipoid extractives—and ergotin 1 grain (0.065 Gm.) doses, thrice daily. Anuria is often due to arteriole constriction and yields to vasodilators of the theobromine type."

GASTRIC OPERATIONS: BEFORE AND AFTER

Dr. Herbert J. Paterson, of London, Eng., in the *International J. Med. & Surg.*, Aug., 1927, gives a summary of his pre- and postoperative treatment in gastric operation cases.

The principal points discussed may be epitomized thus: No preoperative purging; rest in bed for a week before operation; liquid paraffin given during this period; diet for 96 hours prior to operation should be milk and tea, orange juice, with 20 gr. (1.3 Gm.) of bicarbonate of soda for some days until the urine is alkaline; 1 pint of isotonic saline solution, to which $\frac{1}{2}$ oz. (15.5 Gm.) of glucose is added, is given per rectum. By these means the interior of the stomach and jejunum are rendered sterile.

The most important points in sterilizing the skin are the use of acetone and picric acid.

Postoperatively the patient is fed as soon as possible. Small quantities of hot water are given when the patient desires a drink; and if this is retained, a tablespoonful of diluted milk is given every hour. The quantity is increased gradually and the diet added to by degrees, depending

upon the condition for which operation was done.

Liquid paraffin is given after operation and purging is rarely necessary.

The patient should remain in bed for 4 weeks after operation and from the first should be encouraged to expand the lungs thoroughly by deep breathing.

IODINE AND GOITER

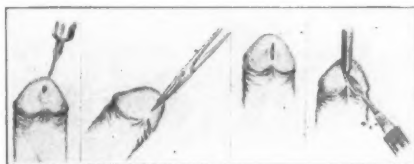
Recent literature suggests that the indiscriminate use of iodine, either for the prophylaxis or treatment of goiter, is dangerous, and that since its introduction the incidence of goiter has been increased.

The experimental administration of iodine to young goitrous children cannot be regarded as completed until they have become fully differentiated, functioning adults; i.e., at about 20 years of age; a clinical diagnosis should precede the use of iodine even in endemic zones; and in non-goitrous children, prophylactic iodine treatment should be a matter for individual physicians on individual patients.—Editorial, *The Endocrine Survey*, October, 1927.

MEATOTOMY

A very small urinary meatus may form a *cul-de-sac*, at the distal end of the penis, which may hinder drainage and cause retention of secretions. It may also prevent the use of sounds and urethrosopes, in cases which require such instrumentation.

Dr. Samuel M. Gellert, of Portland, Ore., feels that meatotomy is a very important operation and, in *Urol. and Cutan. Rev.* for March, 1927, he describes a simple, bloodless and effective method for performing it.



With a sharp needle one or two drops of a 1-percent solution of procaine and epinephrin is deposited at the lower angle of the meatus, the needle entering the point of union of skin and mucous membrane (Fig. 1). The appearance of an ischemic wheal indicates a proper infiltration and one can proceed at once. A narrow straight hemostat is then firmly clamped over the proposed line of incision (Fig. 2) and allowed to remain a minute or two. No more tissue should be included in the grasp of the clamp than is required for the incision. This is represented, when the clamp is released, by a thin film of compressed tissue (Fig. 3). A sound is then introduced of a size as large as the meatus will admit. This film of tissue is then incised throughout its extent with a sharp cautery

blade, cutting against the sound as a guide (Fig. 4).

The size of the meatus should be proportionate to the size of the penis. In doing this operation there is a tendency to cut too freely and overenlarge, which should be guarded against.

After-treatment consists of applying a solution of some antiseptic daily, with a small swab, pressing it well down to the lower angle. This tends to promote healing and keep the edges of the wound separated. After a few days graduated sounds should be passed at intervals to preserve the patency of the new meatus. This also obliterates a frequently coexisting contracture just within the meatus.

PARACENTESIS TYMPANI

Every general practitioner should know how to perform paracentesis tympani.

Dr. W. Stuart-Low, of London, Eng., in *Practitioner*, July, 1927, gives the following as a practitioner's operation:

Freely incise the tympanic membrane under *chloroform* anesthesia. The incision should be a sweeping one, from the lowest point behind the handle of the malleus right up and into the attic, through the ventricular fold, and even on to the meatal wall.

When exudate has cleared away, warm glycerine and carbolic drops (10-percent phenol in glycerin, aged for 2 weeks.—Ed.) should be inserted and a pad of wool placed over the ear and lightly bandaged in position. A plug should never be inserted.

The author has never known this incision to close up and so require a second effort. Antisepsis of the nose and throat should receive attention, but no irrigations or douches are to be used.

INTERNISTS' PROBLEM IN ANESTHESIA

In *Am. J. Surg.*, April, 1927, Dr. A. H. Waterman, of Chicago, pleads for a greater cooperation between the internist referring a surgical case and the anesthetist.

Dr. Waterman thinks that, owing to the many complications that may result from anesthesia, it is imperative that every patient who is to be submitted to it should have a thorough preoperative examination and preparation by the internist referring the patient, or else by a responsible internist in the hospital. It should not suffice that the patient be left to the casual tests of the anesthetist a few minutes before the operation commences.

There should be complete cooperation between the internist and the anesthetist, as to the advisability of subjecting the patient to anesthesia, just as there should be complete cooperation between the internist and surgeon, as to the necessity for operations, the preoperative care and the postoperative management.

The internist must not only possess himself of the patient's confidence; he must extend that confidence to include the other practitioners who are to minister to the patient. All this is part of the internist's problem and his best resources must be brought to bear upon its solution.

ANOREXIA IN CHILDREN

Some of the points brought out by Dr. C. A. Aldrich, of Winnetka, Ill., in a paper on anorexia in children in *J.A.M.A.*, Sept. 17, 1927, are: that the treatment should begin in early infancy; that the diet should be the minimum which would cause a satisfactory gain in weight without any over-feeding; that there should be no forced feeding; that the child should be left alone at meal time but that he should be allowed some latitude in the selection of prepared foods; that feedings between meals should be avoided; and that parents be instructed.

A survey of 199 children in which this prophylactic treatment was adopted showed that none were malnourished except such as were suffering from physical disease. The general idea is that "humoring" of the child in regard to food should be avoided.

INJECTION TREATMENT OF HERNIA

That the results obtained from the formerly employed injection method of treating hernias were as good, if not better than those obtained by surgeons today is the opinion of Dr. Ignatz Mayer, of Detroit, in a series of articles in *M. J. and Record*, April 20 and May 4 and 18, 1927.

Dr. Mayer uses a sterile astringent fluid, the formula of which is:

Zinc sulphate	1 dr. (4.0)
Phenol crystals	6 dr. (24.0)
Glycerine (C.P.)	4 fl. dr. (15.0)
Aqua cinnamoni	1 fl. oz. (30.00)
Fl. ext. pinus canadensis (dark)	5 fl. dr. (19.00)
Sterilized, chemically pure, redistilled water	2 fl. oz. (60.00)

The zinc sulphate is dissolved in the cinnamon water. Liquefy the phenol crystals by heating. Add the glycerine. Shake thoroughly until mixed and cooled; then add the distilled water and finally the fluid extract of pinus canadensis. Shake thoroughly and allow the fluid to stand for about a week, agitating the mixture several times a day. Subsequently it should be filtered. Before injecting, boil the solution in a glass tube or place in the sterilizer in a porcelain receptacle.

In adults, 8 to 16 minims (0.5 to 1 cc.) are injected subcutaneously at intervals of four to seven days according to clinical indications; in children 2 to 4 minims once a week.

The method is contraindicated in the presence of active venereal disease or a history of syphilis, tuberculosis or diabetes.

The injection of this astringent fluid sets up an aseptic inflammation, provoking

seroplastic exudation and adhesions which effectively close the hernial orifice.

Dr. Mayer's opinion is based on 28 years' personal experience and the collection of accurate statistics. In his own practice he has had 98 percent of cases in which permanent relief has been obtained. The reason why the injection method fell into disuse, Dr. Mayer thinks, is because it was greatly abused in the hands of quacks.

The number of recurrences following the injection method is far less than that following surgery, even on exposure to severe work and strain. Many of the author's personal patients went through the hardships of the World War without recurrence. Records also show more than 200 cases in which recurrence followed a radical operation but in which the subcutaneous injection method subsequently brought about complete relief.

SPECIFIC VACCINE FAILURES

Dr. Myer Solis-Cohen, of Philadelphia, in *M. J. and Record*, June 1, 1927, gives the following reasons why specific vaccine treatment sometimes fails:

1.—The dose of the vaccines may not be proportionately regulated. The dose is often determined by the bacteriologist or manufacturer; but the dose in a course of specific vaccine can never be decided upon in advance. It may be too large or too small.

2.—The interval between doses may be too small. A vaccine should not be repeated until the ill effects of the previous dose have passed off.

3.—Vaccine treatment may be too protracted. Too prolonged artificial stimulation may depress antibody production and cause a refractory immunologic reaction. After the maximum dose has been repeated several times it is wise to suspend vaccine treatment for a time.

4.—Vaccine therapy may not be continued long enough. Occasionally patients are refractory or respond slowly to antigen stimulation. When insufficient improvement occurs within a reasonable period, it is well to take a new pathogen, selecting cultures of all possible bacterial foci, and prepare and administer a new vaccine.

JAUNDICE

Dr. David Riesman, of Philadelphia, in *Am. J. M. Sc.*, May, 1927, thinks that as yet there is no definite proof that bile is chiefly formed outside of the liver; still, on clinical grounds, he is inclined to believe that bile can be formed extrahepatically.

Regarding the causative condition, Dr. Riesman says that painful jaundice is usually due to mechanical causes, especially to stone, to cholecystitis or to cholangitis. Only in rare cases is the jaundice of calculus painless. It is not necessary that there should be successive attacks

of colic—one definite painful seizure is of great help in the diagnosis of calculus obstruction.

If jaundice is painless, the possibilities are many. With clay-colored stools and choloria, the suspicion falls on the pancreas or some other nearby structure. The most valuable diagnostic feature of jaundice due to disease of the pancreas is a large gall bladder.

The various functional liver tests give information of the state of the liver rather than of the causes of jaundice.

LITHOLAPAXY

The preponderating surgical opinion in favor of suprapubic cystotomy for the removal of bladder calculi, at the present day, has withdrawn attention from the merits of litholapaxy. This latter method of dealing with bladder stones is the subject of an excellent paper by Sir Thos. Carey Evans, in the *Practitioner* for Sept., 1927.

With the advent of the cystoscope it has become easy to decide which cases of stone in the bladder are suitable for litholapaxy and which require suprapubic lithotomy. Surgeons, as a rule, prefer the cutting operation. But it is the results that count. Dr. Evans says that any stone which can be removed by litholapaxy should be dealt with in this way for the following reasons:

1.—The operation is devoid of danger.

2.—The mortality ought to be *nil*. The mortality of the suprapubic operation is 3 to 4 percent, in the best hands.

3.—Embolism and pneumonia can never be entirely excluded from the suprapubic method.

4.—Convalescence is much more rapid after crushing.

5.—The fear of recurrence after litholapaxy is unfounded; but under the same circumstances recurrence will also happen after suprapubic cystotomy.

The contraindications for litholapaxy are:

1.—All cases in which there coexists some other condition requiring a cutting operation.

2.—In all cases of contracted bladder.

3.—When the stone is very large or fills up the bladder almost entirely.

4.—Where severe cystitis or sepsis exists.

5.—In young children, in the case of operators who are inexperienced in adult cases.

Dr. Evans says that for those who are familiar with the technic and experienced in adult cases, litholapaxy in even very young boys offers no difficulty. Dr. Fryer successfully crushed stones in the bladders of over 200 young males, with a mortality less than 1 percent.

The complications which may occur during litholapaxy are mostly the result of faulty technic or faulty instruments.

The author believes that litholapaxy is the operation of choice for all simple, straight-forward cases of stone in the bladder in which the proper instruments can

be passed. To carry out litholapaxy, however, in cases where a diverticulum new growth exists, or an enlarged prostate with obstruction at the neck of the bladder, is bad surgery.

Unfamiliarity with the instruments and technic and a prejudice in favor of the scalpel are the reasons why litholapaxy is not used to a greater extent today, but the patients' safety should have greater weight.

PARATHYROID HORMONE AND FRACTURE UNION

It has been assumed that because the injection of parathyroid extract increases the blood serum calcium there would also be more calcium available for deposit in fracture callus, thus hastening bony union.

Drs. Edwin P. Lehmann and Warren H. Cole, of St. Louis, in *J. A. M. A.*, August 20, 1927, found experimentally that, in white rats, injection of parathyroid extract does not hasten the calcification of fracture callus. If such injection has any influence on the rate of calcification it tends to delay the process. This would not be discordant with the *a priori* argument that the effect of parathyroid is to mobilize the fixed calcium in the body.

THE ELIMINATION OF CANCER

In the *Univ. of Chicago Mag.*, Nov., 1927, Maud Slye, Associate Professor of Pathology of the University, gives a resume of her work on cancer.

Miss Slye's studies have been carried on with a stock of pedigreed mice, bred in her laboratory for the past 18 years, with which there has been no outside intermixture. These animals fall into three classes: (1), those that are wholly exempt from cancer; (2), those that will never have the disease themselves, but can conditionally transmit it to some of their posterity; and (3), those that are themselves susceptible to the disease.

The cancers spoken of here are *spontaneous* cancers similarly produced and similar in every way, evolutionally and histologically, to spontaneous human cancers. Thus Miss Slye considers that if it is possible to control and eliminate mouse cancer, it will be similarly possible to control and eliminate human cancer.

In the case of mouse cancers, both control and elimination have been possible by regulating heredity. Miss Slye has found:

1.—That when a cancerous mouse was mated with a cancer-resisting mouse *all the offspring were themselves exempt from cancer*, but were able to transmit the disease to *their offspring* if they mated with cancerous mates. If, however, they mated with cancer-resisting individuals, the offspring would always be cancer-free. Thus it has been possible entirely to eliminate cancer in hundreds of laboratory families of mice in only two generations.

The cancer-resisting mice are truly exempt. Mated together they produce families wholly free from cancer as proved in thousands of cases. Those stimuli which, in cancer-susceptible animals, produce cancer, have never done so in these families.

Resistance to cancer is a dominant characteristic compared with cancer-susceptibility, which is recessive. This is proved by the fact that the offspring are cancer-free even when one parent is cancerous.

2.—Animals which are themselves cancer-free, but one of whose parents was cancerous, *if mated with a cancerous animal* can transmit cancer potentiality to the immediate posterity; but, as stated, if a cancer-resisting mate is selected the immediate offspring will be wholly cancer free. Thus hybrid carriers of cancer can also wholly eliminate cancer from their families by selection, and if this be continued, cancer will be entirely eliminated from the descendants.

3.—From any mating of two hybrid carriers of cancer tendency, two-thirds of the offspring will be cancer-free and one-third susceptible. *If these cancer-susceptible animals select cancer-free mates* there should never be another case of cancer in the family.

The cancer-susceptible animals are those in which cancer arises from hyperstimulation, injuries, chronic irritations and other such contingencies as they meet in life.

There are apparently two conditions necessary to produce cancer; and, if either one can be wholly avoided, it should be possible to prevent the disease. The two conditions are: (1) an inherited local susceptibility of the disease; and (2), irritation of the right kind and in the right degree, applied to the cancer-susceptible tissues.

The same type of constant irritation applied to mice having different local susceptibilities, or even susceptibility to different types of malignant disease in the same region, had quite different results. If a mouse had susceptibility to breast cancer, no cancer was produced if the breast tissues were not injured. If a mouse was a susceptible member of a strain carrying any type of internal tumor, but no others, a blow produced no cancer unless it injured the susceptible internal organ.

The experience of the laboratory has seemed to indicate that even susceptibility to skin cancer is localized. This means that if a mouse, susceptible only to skin cancer of the face, was struck anywhere except on the face normal healing took place. Cancer susceptibility is local and not systemic; only injuries to cancer-susceptible tissues are likely to induce cancer.

Miss Slye shows that animals have a genetic sense in selecting mates and that this genetic sense operates to keep strains and species pure.

In the human race there is only a beginning of such a genetic sense; it is possible to develop it and the method of development would be a widespread knowl-

edge of the fundamental operative facts of heredity, in order that there might arise a widespread special interest in the future of human types.

Some further deductions from Miss Slye's investigations are that the behavior of cancer is inconsistent with the germ theory and with the diet-deficiency theory of cancer; also that cancer is not contagious. The tendency to exemptions from cancer is unquestionably inheritable. It must be remembered that many of the families of mice under investigation have been observed for fifty or more generations, comprising thousands of members.

In the case of man, who pays no attention to heredity, statistics show that 1 in 6 persons over a certain age is dying of cancer. The fact of the inheritability of freedom from cancer, however, offers tremendous hope, if the genetic sense in man can be educated. If the operations of heredity can be made known, then man may not be blind to what characteristics he is transmitting to his children. It would become possible wholly to eliminate cancer by properly selected matings.

If we would uniformly permit examination after death, the exact facts concerning disease in man could be obtained and these facts permanently recorded. In two generations the human disease could be eliminated by cancer-free matings, just as it has been found possible to do in the case of laboratory animals.

ATTENUATED INSANITY

That attenuated dementia precox (and epilepsy) is responsible for many business failures, marital wrecks and their sequellae is the opinion of Dr. Rose Alexander as given in *M. J. & Record*, August 3, 1927. The mental stigma is a hereditary legacy.

The symptoms in such cases are cryptic and must be brought to light by the patient physician. The treatment should, if possible, be sterilization and the transfer of all business to the responsible member of the family. Sterilization is in the line of biologic legislation to discourage the fecundity of degenerate stock. The skillful use of psychotherapy by the family physician can successfully effect more in this line of treatment than can be attained any other manner.

NUCLEIC ACID INJECTIONS AND THE BLOOD

The results of experimental investigations by Dr. Olof Larsell and associates, of Portland, Oregon, published in *J.A.M.A.*, August 27, 1927, show that washed nuclei from the red blood cells of the fowl, injected intravenously into rabbits, produce marked hematopoietic stimulation.

The cytoplasm of the red blood cells of the fowl, horse or dog does produce hematopoietic stimulation in rabbits.

Nucleic acids (and nucleoproteins?) obtained from red blood cells of the fowl,

when injected intravenously, produce hematopoietic stimulation just like the nuclei; such injections do not produce deleterious effects in normal rabbits; but in splenectomized rabbits the reaction is very marked. The spleen apparently has a part in assimilating injected nucleic acids.

The authors think that the good effect of liver feeding in pernicious anemia is due, at least in part, to its nuclear content and corresponding large amount of nucleic acids and other nuclear substances.

HANDLING THE OTHER MAN'S PATIENTS

Many factors have combined to alter the ethical conceptions of the young doctor of today, compared with those of his older confreres. Dr. Southgate Leigh, of Norfolk, Va., deals with this matter in *Southern Med. and Surg.*, July, 1927.

With the great advances and developments, Dr. Leigh thinks that certain matters of professional ethics are being neglected, and this is, to a great extent, due to rapid advance in the work of the specialists. Consultants fail to communicate with the patient's home physician before a final decision is rendered; there is a failure on the part of specialists to increase the confidence of the patient in his home physician. When patients change their location or their doctor the new doctor should get all possible information from the former attendant before giving advice on any important matter.

The younger physicians of the present day are chock full of up-to-date ideas but lack the mature judgment and sympathetic outlook which comes only from prolonged experience.

ARTIFICIAL TERMINATION OF PREGNANCY

According to Dr. Wm. D. Fullerton, of Cleveland, in *Ohio State M. J.*, Sept., 1927, public morals have gradually limited the legal performance of abortion to such conditions as seriously jeopardize the life of the mother; and, with our improvement in obstetrics and increased experience, the induction of labor and cesarean section are finding a much more limited field.

Education of the public brings the pregnant woman to the physician sufficiently early, in most cases, to enable him to cope with the situation. Toxic and pernicious vomiting usually yield to glucose administration; regulation of diet and hygiene enable some nephritics to pass through a pregnancy relatively safely; cardiac complications can often be held in check by strict compliance with intelligent medical advice and the woman safely delivered at term, with the special precautions given in such cases.

Insulin in diabetes; modern urologic care in infections of the urinary tract;

conservative surgery of uterine and ovarian tumors; medical care, with even possible ligation in hyperthyroidism, enable many women to weather the storm of pregnancy. In tuberculosis, however, termination of pregnancy is usually warranted and advisable.

ANTERIOR POLIOMYELITIS

In the Omaha epidemic of acute anterior poliomyelitis, in 1925, 69 cases were reported, with a mortality of 27.5 percent.

Drs. B. Carl Russom and Thos. L. Houlton, in the *Med. Herald*, Sept., 1927, report that in the same period 29 cases were observed in St. Joseph's Creighton Memorial Hospital, Omaha.

Sixteen of the 29 cases were of the spinal type; the intercostal muscles were paralyzed in 4, and 3 of these patients died.

There were 5 bulbar cases; the intercostal muscles were involved in 2 and both patients died.

Three cases were of the ascending (Landry) type and all the patients died.

One cerebral case, complicated with paralysis of the intercostal muscles, ended fatally.

The authors draw particular attention to the very high mortality when the intercostal muscles are paralyzed.

VACCINES IN CHRONIC ARTHRITIS

Dr. Kenneth Stone, in *Practitioner*, Sept., 1927, says that vaccine therapy is of most value in early cases of rheumatoid arthritis. When the infective focus is still present an autogenous vaccine should be used; when no infective focus can be found a mixed stock vaccine should be used. The author uses the three main groups of streptococci.

The object sought is not to make the blood bactericidal, but rather to keep the antibody content of the blood at such a level that all streptococci and their products can be combined with and altered antigenically. For this effect the author thinks only small doses of vaccine with very gradual increments should be used, as large doses produce too much reaction. The increment should not exceed 25 to 50 percent of the previous dose and one million cocci should suffice for the initial dose. Intervals between doses should at first be 4 to 5 days and later one week.

The author thinks that to climb up gradually to adequate doses will require several months.

BEHAVIOR IN THE NEWBORN

From a study of the reactions of 75 healthy babies in the first twenty-four hours of extrauterine life, by Dr. Louise Taylor-Jones, of Washington, D. C., reported in *Am. J. M. Sc.*, Sept., 1927, the following conclusions are drawn:

1.—Most of the special senses are used immediately after birth; all may be.

2.—The day-old baby has many activities.

3.—Babies at birth have individuality and personality, as shown by their varied performance.

4.—Babies learn from the first day of life; so that formation of habits and character begins then.

5.—Finally, it may be said that studies of the reactions, even at this early age, may be of value in estimating the mental capacity of the baby; and that it may be possible to derive sufficient information, even from a newborn infant, to make a fairly reliable prognosis of the future development.

TREATMENT OF HEMATEMESIS

Writing in *M. J. & Record*, Sept. 21, 1927, Dr. Walter A. Bastedo, of New York, says that, if the loss of blood from the stomach is gross, but not enough to produce obvious effects of hemorrhage, it will usually suffice to put the patient in bed; give a hypodermic injection of morphine sulphate, gr. $\frac{1}{4}$ (16 mgm.) with strychnine sulphate, gr. $\frac{1}{30}$ (2 mgm.): and to administer 20 cc. of thromboplastin or 2 cc. of hemostatic serum, subcutaneously, to be repeated in 6 hours.

If the hemorrhage is accompanied by weakness, fainting, air hunger and profound anemia, these measures should be supplemented by transfusion and mechanical measures to overcome collapse. If the stomach is distended and the bleeding seems to persist, lavage should be employed and, if deemed wise, this may be followed by the introduction through the tube of a coagulant such as thromboplastin, for local action.

Usually food or fluid by mouth is withheld for about three days, saline solution to allay thirst being given by rectum every 6 or 8 hours and also a daily cleansing enema.

It should be remembered that many cases of hemorrhage cease spontaneously.

PULSE PRESSURE

Dr. J. Marian Read, San Francisco, in *California & West. Med.*, August, 1927, states that the minute volume of the output of the heart, being the product of heart rate and stroke volume, may be varied by altering either one or both of these factors; augmented blood flow results from an increase in one or both; and diminished blood flow follows a decrease in one or both. Proportionate changes in both, but in opposite directions, tend to maintain a constant minute volume.

In certain conditions, alterations in pulse pressure occur which are in the same direction as one would expect stroke volume to vary in these conditions.

While pulse pressure is not an accurate measure of systolic output, its direction

and magnitude of variation seems to parallel the changes in the output, and may therefore be used as a rough index of the stroke volume.

AMPUTATION OF INDEX FINGER

Dr. Stephen J. O'Brien, of Munsing, Mich., in *Illinois M.J.*, August, 1927, considers that the specific point for amputation of the index finger should be located at the center of the middle third of the second metacarpal bone, in individuals possessing an otherwise normal hand.

The advantages of this method over the classical operation are: greater restoration of function; greater strength, sensitiveness and usefulness; better cosmetic results; better economic results; operation is more easily performed, in a clean field without complicated anatomy.

Several illustrative cases are reported.

HEREDITY IN THE CLINIC

Up to now the factor of heredity in the causation of disease has had but very little influence among clinicians in America. Dr. L. F. Barker, of Baltimore, in *Am. J. M. Sc.*, May, 1927, points out that, although American biologic thought is saturated with genetic considerations, there is an apparent apathy of medical men with regard to the problems of inheritance.

Dr. Barker suggests reasons for the coolness of laboratories of clinical research in medical schools in this regard. But he thinks that there are signs that clinical medicine is awakening to its new opportunity of investigating disease from the viewpoint of heredity and that soon there will be a flaming revival of interest in the significance of heredity for medical theory and practice.

The doctrines of heredity have not been congenial to medical thinkers because they were unprepared for them by their earlier education. But the younger men entering medicine today have had a better biologic training than their predecessors.

It cannot be long before the repercussion of the theory of heredity upon medicine will become much more noticeable than hitherto.

THE HANDLING OF PROSTATITIS

Dr. Andrew J. Crowell, in *Urol. and Cutan. Rev.*, May, 1927, says that the factors which should govern the treatment of prostatitis are: (1) operability; (2) pre-operative preparation; (3) postoperative case.

The method of treatment is foreordained by the surgeon, since he is almost always a warm advocate of either the suprapubic or perineal route. The author prefers the perineal.

Operability will mostly depend upon kidney functional tests. It is the nephritis in old prostates that is the complication most

feared in prostatectomy. Decompression bladder drainage (or a primary cystotomy) should receive attention.

The cardiovascular system, when caudal or sacral anesthesia is employed, is of little relative importance; but a systolic pressure of less than 110 and a diastolic lower than 60 should be viewed seriously.

The perineal operation allows for not only postoperative drainage of the wound, but also of kidney secretions.

DIATHERMY IN OSTEOMYELITIS

Dr. Disraeli Kobak, of Chicago, in *Arch. Phys. Therap.*, Sept., 1927, says that in chronic, traumatic osteomyelitis there is not only the loss of bone, but also of the potential source of new bone. Diathermy is indicated on the basis of Van t'Hoff's generalization that a rise in temperature of one degree C. is accompanied by an increase of 10 percent in the velocity of any chemical reaction capable of being accelerated. Diathermy can thus accentuate the osteogenetic process in the vicinity where applied.

Kobak's experience, however, is that gentle diathermy rather than intensive application stimulates the chemical processes responsible for repair and union; also that through-and-through diathermy (not the double cuff arrangement) is the most effective method of application—a conclusion which was verified in practice.

Superficial heating in fact may be a contraindication and even conducive to arrest of union and repair.

INTRAVENOUS MEDICATION

Dr. John H. Frick, of Philadelphia, in *M. J. & Record*, Aug. 3, 1927, refers to some dangers of intravenous medication.

Apart from defects in manufacture of ampules and dangers arising from instability of products, there are dangers especially connected with administration. Succinctly, these are:

Failure in strict asepsis;

Administration of solutions too hot or too cold for mixing with blood stream;

Obliteration of the vein, either by too rapid injection or by use of improper concentration of solution. Only the finest of needles (16 gauge) should be employed and, as a rule, a minute should be taken to inject each 2 cc.;

Injection made outside the vein. This should be evident from undue pain and unusual swelling at the site of injection;

Spasms and convulsions occasionally observed during the course of an injection.

When large volumes of fluid have to be injected into the circulation, Dr. Frick says that there is one symptom which it is well to heed; namely, appearance of *backache* in the patient. If such a complaint is made, injection should be stopped immediately. Similarly in the case of an increased pulse rate.

During a ten-years' practice of intravenous medication, Dr. Frick has personally seen very few reactions. This he attributes to the fact that only solutions of proper concentration were used; that these solutions were properly seasoned and kept in the containers under ideal conditions; that care and time were taken in the administration and that the solutions were introduced at the blood stream temperature.

SHORTENING POSTPARTUM REST IN BED

A study of 446 uncomplicated cases in the Bronx Hospital, New York, has led to the conclusion, after a year of observation, that the wellbeing of the patient in the puerperal state, in uncomplicated labors, seems to vary inversely with the duration of the period of rest in bed. Getting the patient out of bed early (by the sixth day, on the average) seems to have quickened rather than prolonged the involution of the uterus and its supporting structures; venous stasis is prevented and morbidity is decreased.

These patients were allowed to sit up in bed after 24 hours and to use a commode after 48 hours, if the bowels did not move readily in the recumbent position.—DRS. H. J. EPSTEIN AND A. J. FLEISCHER, in *Am. J. Obst. & Gynec.*, Sept., 1927.

HERNIA IN THE INFANT AND YOUNG CHILD

Dr. Andre Martin, of Paris, France, in *M. J. & Record*, Sept. 7, 1927, recommends that, in inguinal hernia cases, where there is simple persistence of the peritoneo-ovaginal canal, operation should be deferred until after the fifth or sixth year; with the sac usually reducible, operate toward the end of the first year.

If the sac is irreducible, operate in the absence of any general contraindication.

In umbilical hernia, operate about the fifth year.

In crural and epigastric hernia, operate as soon as the diagnosis has been determined.

"PROTEAL" TREATMENT OF DRUG ADDICTION ("NARCOSAN")

Commenting upon the treatment of drug addiction by a patented preparation of lipoids, vitamins and nonspecific protein (from alfalfa seeds), termed "narcosan," Dr. Martin G. Carter and associates, of Los Angeles, show in *M. J. & Record*, Sept. 7, 1927, that the effects produced are due to the alfalfa protein alone.

The authors believe that in drug addiction there is an endocrine disturbance and that treatment of the condition must be directed toward stimulating and sustaining the endocrine system during the withdrawal period.

The authors found by experiment that exactly similar clinical effects were obtained in the treatment of drug addicts by alfalfa protein alone as with narcosan. The alfalfa protein is termed "proteal."

To fortify the protein effect in their treatment of addicts, males are also given 5 cc. of orchic extract, injected into the gluteal muscle and repeated at three-day intervals. In females 1 cc. of ovarian hormone is administered daily. One cc. of proteal is given, subcutaneously, every 4 hours for the first 24 hours; then at intervals of 6 hours for the next 48 hours; then three times daily for the next three or four days; and once daily thereafter.

Clinically, this foreign-protein-endocrine treatment is highly satisfactory—quite as much so as the narcosan treatment—and is far less expensive, requiring no patented preparations. Proteals (vegetable proteins) can be obtained from a large variety of seeds.

UREMIC MANIFESTATIONS IN THE RESPIRATORY TRACT

The literature shows a certain amount of evidence that the respiratory mucosa may become saturated with the nitrogenous poisons produced in uremia; the mucosal lesions being of an ulcerous or pul-taceous type.

Dr. M. C. Myerson, of New York, in *J.A.M.A.*, August 27, 1927, mentions a number of cases in which a peculiar dough-like coating on the mucous membrane of the hypopharynx, larynx, trachea or bronchi was observed. This phenomenon appears during the stage of the onset of uremia and when seen is diagnostic of an impending uremia; in some cases it may be the only manifestation. Such a coating in the trachea or bronchi may lead to signs which are mistaken for those of bronchopneumonia.

The lesions observed by Dr. Myerson were of the pultaceous variety in all cases except one.

HICCUP CONTROLLED BY CARBON DIOXIDE

Dr. Russell F. Sheldon, of Boston, in *J.A.M.A.*, October 1, 1927, reports 11 cases of hiccup following surgical operations, relieved by the inhalation of carbon dioxide. The Henderson-Colburn machine or the Gwathmey anesthesia apparatus (Seattle model) may be used, and the mixture is from 4 to about 5 percent of carbon dioxide in air. This will usually control hiccup during its administration and for a varying period thereafter.

This method is contraindicated for asthenic patients or for those to whom the marked respiratory effort would be more detrimental than the continuance of hiccup. Usually the patient experiences no discomfort.

New Books

COVA: ATLAS OF THORACOSCOPY

ATLAS THORACOSCOPICON. By Dr. Felix Cova, Apud Sanatorium Victorio Emanueli III Regi Dicitum Archiater. Editores Sperling & Kupfer, Via Larga, 21, Milan, Italy. 1928. Price Mk. 37, 50 or \$9.00.

Since the publication of the first pictures of bladder lesions, following the introduction of Nitze's cystoscope, nothing of this kind has been published which has interested us so much as the fine series of tri-colored plates of thoracic lesions, published by Dr. Cova under the above title.

This is the first real thorascopic atlas published. It would be quite impossible in a short review to give any adequate idea of the beauty and clearness of the colored drawings. They are not printed in the ordinary way, but each picture is mounted independently on its own page and accompanied by a letterpress description in Italian, German and English.

This book should be of the utmost value to thoracic surgeons; but it should also be of high interest to pathologists as well as to every physician interested in the study and diagnosis of diseases of the lungs and of the pleural cavity. It should give a great impetus to the study of such diseases. It is the result of a series of thorascopic studies made by the author in the Victor Emanuel Hospital of Milan, Italy.

Quite apart from its direct diagnostic and clinical value it should interest every lover of fine medical books.

WHITMAN: ORTHOPEDIC SURGERY

A TREATISE ON ORTHOPAEDIC SURGERY. By Royal Whitman, M.D., M.R.C.S., F.A.C.S., Surgeon to the Hospital for the Ruptured and Crippled; Consultant to St. Giles and St. John's Guild Hospitals; etc. Eighth Edition, Thoroughly Revised. Illustrated with 954 Engravings. Philadelphia: Lea & Febiger. 1927. Price \$9.00.

Since the appearance of the first edition of Dr. Royal Whitman's book, in 1901, the scope of orthopedics in general and of orthopedic surgery in particular has been greatly extended until, as the author remarks in the present (eighth) edition, the subject includes a number of groups of conditions, unrelated in etiology and pathology, but having a common basis of mechanical bodily disability.

Dr. Whitman presents the whole subject of orthopedics, so far as practicable, from a functional standpoint and in a manner that experience has proved to be acceptable in his own clinical teaching. The book may therefore be classed as an exposition

of his personal experience and views on the practice of orthopedic surgery.

At the same time, as the general practitioner is, in the majority of cases, the first to see and treat these deforming diseases, the author has taken pains to demonstrate methods of systematic physical examination that lead to early diagnosis and the forestalling of probable consequences. The book therefore is not one for the orthopedic specialist alone, but should be familiar to general practitioners as one of the leading standard textbooks on the subjects within its scope, giving the best current procedures on matters that will often come within their daily practice.

Advantage has been taken of this new edition to bring the book up to date in regard to all recent acquisitions and accepted procedures in orthopedics.

SHEEHAN: ORBITAL PLASTICS

PLASTIC SURGERY OF THE ORBIT. By J. Eastman Sheehan, M.D., F.A.C.S., Professor of Plastic Surgery, New York Post-Graduate Medical School and Hospital; etc. With a Preface by Pierre Sebileau, Professeur de la Faculté de Médecine de Paris. New York: The Macmillan Company. 1927. Price \$12.00.

Dr. Sheehan points out that both physicians and surgeons, as a general rule, treat plastic surgery with a degree of indifference which is not warranted. This attitude is mainly the result of ignorance in regard to what has been accomplished in recent years in this branch of surgery.

The establishment of chairs of plastic surgery in some of the leading medical schools and the increasing number of those who are fitting themselves for this class of work will undoubtedly incite more general interest in the subject.

Plastic surgery is not concerned mainly with esthetics. Its first concern is functional restoration. There are also the economic and social aspects of the correction of unsightly disfigurements, and the great demand for such work has driven the victims into the hands of unscrupulous charlatans because the surgical profession has neglected its opportunities.

Dr. Sheehan's experience, both here and in France and England, well qualifies him to write a treatise on the plastic surgery of the orbit. The book opens with a description of the anatomy and physiology of the orbital region; the second part deals with preoperative care and preparation of grafts, etc.; the third part deals with restorative procedures.

The dominant note in the procedures recommended by Dr. Sheehan is the impor-

tance of physiologic restoration. The roles of the skin, of the muscles, etc., and their physiologic connection with the orbital apparatus and functions are constantly kept in view.

The book is profusely illustrated, many of the plates being in color.

On the whole, so far as can be judged, the book is an excellent presentation of the present condition of plastic surgery of the eye and may be confidently recommended to surgeons and others who are interested in this work.

MEAD: MOUTH

DISEASES OF THE MOUTH. By Sterling V. Mead, D.D.S., Professor of Oral Surgery and Diseases of the Mouth, Georgetown Dental School; Professor of Diseases of the Mouth, Georgetown Medical School; Oral Surgeon to Georgetown Hospital; etc. With 274 original illustrations in the text and 29 full page color plates. St. Louis: The C. V. Mosby Company. 1927. Price \$10.00.

This extensive monograph on diseases of the mouth, (containing nearly 600 pages) shows to what degree specialties are being developed in the modern practice of medicine.

Dr. Mead says that his book is the result of the growing need for a more intimate cooperation between dentists and physicians, in the effective handling of the intricate problems of oral sepsis and other affections of the mouth; and there can be no doubt that the mouth as a portal of entry is intimately associated with the initiation of quite a number of important systemic diseases.

The book is primarily intended as a textbook for dental and medical students, to supply both dentists and practitioners with the fundamental knowledge necessary to make a correct diagnosis of mouth conditions. There can be no doubt that the dentist is almost always the first to see abnormal conditions, the correct treatment of which is outside his special province and which should be referred to a physician or surgeon.

The opposite, of course, is also true. It is certainly desirable that, as the author recommends, dentists should make routine examinations of the mouth generally, as well as of the teeth, as the detection of a septic or neoplastic condition in time may be of the most vital importance to a patient.

The book contains 34 chapters, 11 of which deal with specific dental conditions. Other chapters deal with diseases of the lips, tongue, throat, etc., and such specific conditions as syphilis, stomatitis, salivary disorders and the like.

We notice that very little is said on the nature of the saliva itself and of its importance as a secretion, both from the bacteriolytic and digestive viewpoints. There is, however, a very fair amount of research literature on this subject which has been rather neglected.

There are 274 original illustrations, 29 being full page color plates.

The book is very legible and well arranged, and, on account of the importance of the matters treated, deserves a place on the bookshelves of dentists and practitioners.

MUNRO: PSYCHO-PATHOLOGY OF TUBERCULOSIS

THE PSYCHO-PATHOLOGY OF TUBERCULOSIS. By D. G. Macleod Munro, M.D., C.M., M.R.C.P. (Ed.) London, New York, etc.: Oxford University Press. 1926. Price \$1.75.

It seems rather an unnecessary refinement to invest tuberculosis with a special psycho-pathology. Perhaps tuberculous patients think and react differently as a result of their disease—most sick people do—but that this book will be of value, as the author hopes, to the general practitioner, from the viewpoint of diagnosis in the latent and early stages of the disease, seems to the reviewer very doubtful, and we have scarcely arrived at the stage of even considering psycho-therapy. That many mental peculiarities have been observed in tuberculous persons seems a *post hoc ergo propter hoc* argument.

WEBSTER AND BRENNAN: POTASSIUM AND TARTRATES

POTASSIUM AND TARTRATES. A Review of the Literature on Their Physiological Effects. By Ralph W. Webster, Ph.D., M.D., Professor of Medical Jurisprudence in University of Chicago (Rush Medical College), Chicago, Illinois; Director of Chicago Laboratory. With a Digest and Bibliography of the Literature by W. A. Brennan, A.B. Chicago: The Commonwealth Press. 1927. Price \$2.50.

This book deals first with the general physiologic and toxic effects of potassium in the animal body and the nature of the toxic phenomena manifested, according as potassium salts are introduced parenterally or by mouth.

The effects of tartrates are dealt with in the same way. Particular attention is drawn to the occurrence of tartrate nephritis, which is a common finding in experimental animal investigations after administration of tartrates. This is especially true of potassium tartrates.

WEBB AND RYDER: TUBERCULOSIS

OVERCOMING TUBERCULOSIS. An Almanac of Recovery. By Gerald B. Webb, M.D., Consulting Physician, Cragmor, Glockner, Sunnyside and the National Methodist Episcopal Sanatoria; etc.; and Charles T. Ryder, M.D., Cragmor and Glockner Sanatoria; etc. Third Edition Revised. New York: Paul B. Hoeber, Inc. 1927. Price \$2.00.

This is the third edition of a little book, written by men of great experience, deal-

ing with the course to be followed by tuberculous patients who wish to participate actively in the institutional treatment of their disease.

It is not only a guide for the individual, but the rules and the reasons for them can be read with profit by all those directly or indirectly connected with the conquest of tuberculosis.

WOLBARST: GONOCOCCAL INFECTION

GONOCOCCAL INFECTION IN THE MALE. By *Abr. L. Wolbarst, M.D., Urologist and Director of Urologic Clinics, Beth Israel Hospital; Consulting Urologist, Central Islip State Hospital, etc. With a Chapter Written by J. E. R. McDonagh, F.R.C.S., Surgeon, London Lock Hospital, etc. With Eighty-Nine Illustrations, Including Seven Color Plates.* St. Louis: The C. V. Mosby Company. 1927. Price \$5.50.

Although the treatment of gonorrhea, especially of its complications, has, in the larger towns at least, passed to a great extent into the hands of urologists, yet the disease and its sequelae are so prevalent, both in males and females, that every practitioner is constantly meeting with them.

Dr. Wolbarst's book is an attempt to bring the most recent advances in the treatment of gonococcal infections within the scope of the general practitioner. Particular emphasis is laid upon the diagnostic and therapeutic features, urinary tests (especially the tests devised by the author) and the numerous newer instrumental aids in both diagnosis and treatment with which the practitioner should be familiar.

The volume is very amply illustrated. The language is simple and the descriptions easily followed. The chapters on the treatment of urethral stricture and chronic posterior gonorrhea seem to be particularly commendable.

SANGER: HAPPINESS IN MARRIAGE

HAPPINESS IN MARRIAGE. By *Margaret Sanger, Author of "Woman and the New Race" and "The Pivot of Civilization."* New York: Brentano's. 1927. Price \$2.00.

Every physician with any insight at all knows that a very considerable proportion of unsuccessful marriages fail because of lack of knowledge, patience and skill on the part of both partners, but particularly the husband. If the physical aspect of the marriage relation can be made delightful and satisfying, to both husband and wife, that marriage will be a success.

Margaret Sanger's life and activities have given her peculiar opportunities for gaining the knowledge upon which to base a book like this, which sets forth in sufficient detail the technic of lovemaking before and after marriage and gives directions for establishing and maintaining the sort of love life which will grow more beautiful as the years go by.

After several chapters of general or introductory matter (all of value), the

author takes up the details of courtship, for both the man and the girl; discusses the various phases of the period of the engagement; and outlines the most satisfactory arrangements for the honeymoon.

After a brief, simple but adequate description of the genital organs of both sexes, she enters upon a sane, frank and delicate description of the various acts in the "Drama of Love"—the development and consummation of the sex embrace. Her handling of this subject is sufficiently explicit to be understood by any thoughtful and civilized person of either sex, at the same time avoiding the slightest tinge of prurience or eroticism. It is well done.

The closing chapters deal briefly with the causes of impotence and frigidity; the importance of avoiding premature parenthood by intelligent birth control; and the husband as a lover.

This is a book of normal sex life, written for normal people. There is no sex pathology, physical or mental, in the entire volume.

If every engaged couple (and many who are married, but not satisfactorily mated) could read this book, separately at first and then together, many unhappy marriages could be avoided or saved from going on the rocks.

Physicians will do well to recommend this work to people who need it—and they are many!

BRUGSCH: GENERAL MEDICINE

ERGEBNISSE DER GESAMTEN MEDIZIN. Unter Mitwirkung hervorragender Fachgelehrten. Herausgegeben von Prof. Dr. Th. Brugsch. Zehnter Band, 1, 2, 3 und 4 Heft. (In 2 vols.) Berlin N24, Friedrichstrasse 105B; Wien 1, Mahlerstrasse 4: Urban & Schwarzenberg. 1927. Price 28 Marks.

Previous volumes of this comprehensive work have been reviewed in *CLINICAL MEDICINE AND SURGERY*. In this volume (Volume 10) the following chapters are included: Ileus, Molds, Paravertebral Injections, Surgical Treatment of Lung Tuberculosis, Treatment of Certain Abdominal Infections, Schizophrenia, Scarlet Fever, Bacteriologic Investigation of the Duodenal Contents and their Diagnostic Significance, Action of Muscular Work in Athletics, Diseases of the Gall Bladder, Polycythemia, Experimental Basis of Iron and Arsenic Therapy, Intestinal Endoscopy, Treatment of Female Sterility, Character and Temperament and their Bodily Basis, The Italian Constitutional Studies.

The volume is well indexed.

E. H. V.

BURKE: VENEREAL DISEASE

TREATMENT OF VENEREAL DISEASE IN GENERAL PRACTICE. By *E. T. Burke, D.S.O., M.B., Ch.B. (Glas.), Editor, Syphilis Section, "British Journal of Venereal Diseases"; Venereal Diseases Officer to the*

County Borough of Warrington; etc. New York: Oxford University Press, 35 West 32nd St. 1927. Price \$1.75.

A very concise and eminently practical manual for students and practitioners, containing all the essentials of the present-day chemotherapy of syphilis and gonorrhea.

The author endeavors to substitute a treatment of venereal disease based on modern scientific research for the obsolete methods in use by many practitioners. Such a book is worthy of careful study.

ELLIS: PATHOLOGY

ELEMENTS OF PATHOLOGY. By Aller G. Ellis, M.Sc., M.D., Rockefeller Foundation Visiting Professor of Pathology and Director of Studies, Medical Department of Chulalongkorn University, Bangkok, Siam; etc. With 95 Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1926. Price \$5.00.

This is an elementary textbook which the author intends for the use of students, especially beginners. The second part is intended to be useful to physicians who make or see postmortem examinations.

The book contains all the elementary facts which a student must know, and can be easily assimilated, as the language used is as simple as possible. Such additional matters as some teachers may consider necessary can be embodied in lectures.

The book appears to fulfil its purpose as a concise and plainly written compendium of the necessary facts of pathology, omitting all non-germane matter, and is especially to be used in association with lectures.

HESS: NUTRITIONAL DISORDERS OF INFANCY

FEEDING AND THE NUTRITIONAL DISORDERS IN INFANCY AND CHILDHOOD. By Julius H. Hess, M.D., Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; etc. Illustrated with Forty-Five Engravings and One Full-Page Colored Plate. Fifth Revised and Enlarged Edition. Philadelphia: F. A. Davis Company, 1927. Price \$4.50.

It might be said with reason that almost all infantile mortality is due, either directly or indirectly, to insufficient or improper feeding. Dr. Hess' book is a highly specialized monograph on the particular branch of pediatrics which deals with the nutritional disorders of infancy and childhood.

Parts II and III deal with breast feeding and artificial feeding. Parts IV to IX deal with the nutritional disorders in artificially fed infants and form the main portion of the book.

For the general practitioner who is not a pediatrician this book seems to contain all that is likely to be of value in regard to the prophylaxis and treatment of infantile diseases.

Nurses can also derive a wealth of valuable information from it.

Advantage has been taken in this fifth edition to revise where necessary and add newly acquired knowledge.

WOOD: DESTINY

DESTINY. By Ernest Wood, Author of "Concentration," etc. Wheaton, Ill.: The Theosophical Press. 1923. Price \$1.00.

No matter what we may be doing or how deeply we may be absorbed in our work, there come times in the lives of all of us when we sit alone and wonder why we are here; why we suffer and enjoy; whether there is really any basis upon which our experiences are founded; and what, if any, relation we bear to the great moving and guiding Force in the universe, which most of us call God.

In this little volume of 60 pages, which can be read in an hour or two, but which will repay the most painstaking study, will be found a rational, sensible and practical answer to most of these questions.

A few quotations will indicate the flavor of the author's philosophy.

"If there is any purpose in human life, it lies in the perfecting of man's powers—of his will and love and understanding—not in the work itself, but for the sake of the one who works."

"The cause of pain is always to be traced to the mind, with its memory and imagination, its anxiety and fear, its magnification and perpetuation of the pains and sorrows of life. Even the physical pains and troubles of life are largely of its manufacture. . . . Even the physician who cures a suffering man would make his work more complete and permanent were he to say, 'I have cured your body for the moment only; look now to your mind as the source of your weakness.'"

"Study all things, and classify them as those which are within your power and those that are out of your power. Then, by allowing the mind to concern itself only with those that are within your powers, you will give it scope for activity and exercise, but not for distress or inquietude about any outside thing."

"Thought is the activity of consciousness; motion is the activity of matter."

"God is to be found in Nature everywhere, in the form of perfect law."

There is scarcely a page in the book that a thoughtful man will not want to mark with his pencil.

In these times of stress and change it is a great refreshment and assistance to find a man who is able to deal with some of the big, fundamental problems which face us all in such a sane and reasonable manner as to clarify them for us and shed a fuller light on the road we all are traveling.

To all who think above and beyond personalities and the small problems of the immediate hour, this little book is cordially recommended.

FISHER: OPHTHALMOSCOPY, RETINOSCOPY AND REFRACTION

OPHTHALMOSCOPY, RETINOSCOPY AND REFRACTION. By W. A. Fisher, M.D., F.A.C.S., Chicago, Professor of Ophthalmology, Chicago Eye, Ear, Nose and Throat College; etc. Second Revised and Enlarged Edition. With 260 Illustrations, Including 48 Colored Plates. Philadelphia: F. A. Davis Company. 1927. Price \$3.75.

This book is written to give the student and general practitioner such a knowledge of ophthalmoscopy and retinoscopy that he will be able to recognize ordinary eye diseases. The principles of refraction are explained so that any doctor can fit glasses.

It is the author's opinion that ophthalmoscopy and the fitting of glasses belong to the general practitioner.

In this second edition several additions have been made, notably descriptions of the Gullstrand Binocular Ophthalmoscope and Slit Lamp Illumination.

KLEMPERER & DÜNNER: CLINICAL THERAPY

GRUNDRISSE DER KLINISCHEN THERAPIE INNERER KRANKHEITEN. Von Prof. Dr. Georg Klemperer, Direktor der IV. medizinischen Universitätsklinik ärztl. Direktor des städt. Krankenhauses Moabit in Berlin. Unter Mitwirkung von Oberarzt Dr. L. Dünner. Dritte Auflage. Berlin N, Friedrichstrasse 105 b and Wien I, Mahlerstrasse 4: Urban & Schwarzenberg. 1927. Price, geh. Mk. 6.-, geb. Mk. 7.50.-

Dr. Klemperer has for many years been the editor of "Therapie der Gegenwart." In the present (third) edition of his book on the elements of the clinical treatment of internal diseases he has the collaboration of Dr. L. Dünner.

As a concise outline of the correct modern treatment of internal diseases the book is, as might be expected, excellent in every way as far as it goes; but it does not go far enough. It has not sufficient detail to be of great help to the every day practitioner.

TESTING SPHYGMOMANOMETERS

USE AND TESTING OF SPHYGMOMANOMETERS. *Technologic Papers of the Bureau of Standards (Department of Commerce), No. 352 (Part of Vol. 21).* By J. L. Wilson, Assistant Physicist, H. N. Eaton, Engineer, and H. B. Hendrickson, Assistant Physicist. August 30, 1927. Washington, D. C.: Superintendent of Documents, Government Printing Office. Price: 20 cents; \$1.25 per volume on subscription.

It will interest physicians to know that all sphygmomanometers manufactured by reputable firms in the United States have their gauges tested by the Government Bureau of Standards. This practice is in vogue since the World War when it was important that the instruments used by

the Government, both in the medical and aeronautic services, should be accurate. The Bureau of Standards has worked out a number of tests and these have been embodied in their *Technologic Paper No. 352* which may be obtained on application by any physician interested.

ABDERHALDEN: BIOLOGIC LABORATORY METHODS

HANDBUCH DER BIOLOGISCHEN ARBEITSMETHODEN. Unter Mitarbeit von über 600 bedeutenden Fachmännern herausgegeben von Geh. Med.-Rat Prof. Dr. Emil Abderhalden, Direktor des Physiologischen Institutes der Universität Halle a. d. Saale. Abt. IV, Angewandte chemische und physikalische Methoden, Teil 4, Heft 7 (Schluss). Berlin N24, Friedrichstrasse 105b; Wien 1, Mahlerstrasse 4: Urban & Schwarzenberg. 1927. Price 4.50 Marks.

This is the fourth part of the last volume of the series, whose previous parts have been reviewed in CLINICAL MEDICINE AND SURGERY. It contains two chapters: "Method of Obtaining Exudates and Transudates"; and "Certain American Micro-methods of Blood Analysis."

E. H. V.

APPOINTMENT CALENDAR

1928 APPOINTMENT CALENDAR. Published by The Scholl Mfg. Co., Inc., Chicago, 213 West Schiller St.; and New York, 62 West 14th St. Price \$2.00.

Every busy doctor, dentist and other professional man needs a book to keep track of his appointments. Here is a good one, strongly and handsomely bound, with a page for every day in the year, arranged for recording appointments at half-hour intervals, from 8 A.M. to 9 P.M., also charges and payments made.

MORSE & COLCORD: EMERGENCIES

EMERGENCIES OF A GENERAL PRACTICE. By the late Nathan Clark Morse, A.B., M.D., F.A.C.S. Revised and Rewritten by Amos Watson Colcord, M.D., Surgeon, Carnegie Steel Co.; Surgeon, Pennsylvania Railroad System; etc. Second Edition. St. Louis: The C. V. Mosby Co. 1927. Price \$10.00.

There are times, many times, in every doctor's practice when he is face to face with some emergency and must act at once and without hesitation. It may be a foreign body swallowed, a third degree burn, an obstetric impasse, but whatever it is it calls for instant decision and action and, in the case of an isolated doctor without adequate armamentarium, it is difficult to decide, off hand, just what to do.

The late Dr. Morse wrote his book in 1918 to meet such emergencies and it was the result of a long and varied experience in dealing with such problems. The present (second) edition has been thoroughly revised by Dr. Colcord who has added a

number of methods found suitable from his personal experience in all kinds of emergencies.

The book deals with foreign bodies, asphyxia, industrial accidents of all kinds, fractures, emergency amputations, poisonings, and in fact with all kinds of emergencies, including those encountered in obstetric work. There are many illustrations which are of such a type as to be really helpful.

This is a book which the general practitioner, especially he whose practice is in a rural district, cannot afford not to have and study thoroughly.

HERRMANN: CASE-TAKING

CLINICAL CASE-TAKING. *Supplement to Methods in Medicine.* By George R. Herrmann, M.D., Ph.D., Assistant Professor of Medicine, Tulane University, New Orleans. St. Louis: The C. V. Mosby Company. 1927. Price \$1.50.

According to some authorities, the accurate clinical study of a patient is more important for diagnosis and treatment than laboratory study. Of course, in a correct clinical study, symptoms and laboratory reports have their proper value.

Dr. Herrmann's book is a guide to correct and complete clinical case-taking—a supplement to Docks' *Manual of Medical Service*—which was elaborated under the guidance of Professor John H. Musser, of Tulane University.

The book is a guide for the taking of the patient's history, both before and during his stay in the hospital; it is an elaborate model of what a complete case record should be; though perhaps some may consider the details unnecessarily profuse, yet, as the author says, it gives the intern an ideal towards which he may work when he becomes a practitioner and clinician and he will avoid the fragmentary, careless and entirely inadequate methods of case-taking which are too often in vogue today.

INTERNATIONAL CLINICS, December, 1927

INTERNATIONAL CLINICS. *A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles by Leading Members of the Medical Profession Throughout the World. Volume IV, Thirty-Seventh Series.* 1927. Philadelphia and London: J. B. Lippincott Company. Price \$3.00 per volume; \$12.00 per year.

The December number of the thirty-seventh volume of this well-known serial contains 35 instructive clinical articles, of which 25 are "Travel Clinics"; that is, clinical lectures delivered by various foreign internists and surgeons to the members of the 1927 European tour of the Interstate Post-Graduate Medical Association of North America.

To pick out a few from the many excellent papers by acknowledged authorities on

their subjects we might mention the paper on pleurisy by Scheel of Oslo, Norway; those on radium therapy in Stockholm, by Forssell; on duodenal ulcer by Paterson, of London, Eng.; on capillaroscopia by Bettmann, of Heidelberg; and the clinics given by Troell and Haglund, in Stockholm, and by Gordon-Watson, in St. Bartholomew's Hospital, London.

The number is brimful of good things and every paper will well repay perusal.

MEDICAL CLINICS OF NORTH AMERICA

THE MEDICAL CLINICS OF NORTH AMERICA. *Tulane University Number. Volume 11, Number 3, November, 1927. Philadelphia and London: W. B. Saunders Company. Issued serially, one number every other month. Per Clinic year, July 1927 to May 1928, Paper \$12.00; Cloth \$16.00 net.*

The November, 1927, number of this serial is devoted to clinics from the Tulane University School of Medicine. The volume opens with a clinic on measles by Professor J. H. Musser. There are fifteen other clinical papers, including those on pleurisy, streptococcus pneumonia, purpura, etc. Two papers, one on the macular lesions of leprosy and one on plague, are contributed from the United States Marine Hospital of New Orleans.

A paper which strikes us as particularly interesting is that by Dr. I. I. Lemann on the conservative treatment of diabetic gangrene. It would seem from some of the examples cited that amputation in these cases is not so imperative as is generally considered.

ROHDENBURG: LABORATORY PROCEDURES

CLINICAL LABORATORY PROCEDURES. By George L. Rohdenburg, M.D., Director of Laboratories, Lenox Hill Hospital; Consulting Pathologist, Lincoln Hospital, etc. New York: The Macmillan Company. 1927. Price \$3.25.

This book is a concise and very practical resume of all the methods which the author's experience of many years has shown to be best in combining simplicity with clinical accuracy in laboratory procedures.

No time or space is wasted in discussions, but the method of blood, sputum, urine and pathologic specimen examinations is briefly and clearly described, step by step.

A feature of the book is that each alternate page is left blank so that notes which experience suggests may be added.

The book should be very valuable to all laboratory workers, both in hospital and private practice, especially to the practitioner who is making his own examinations.

Medical News



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MOTORCYCLE AMBULANCE

A new invention which the French military men have introduced is a motorcycle ambulance which can carry the driver, the doctor and the victim. This type of ambulance is thought ideal for war time, especially in the case of fallen aviators who might crash in a place impossible for an automobile ambulance to reach, but easily accessible to the small motorcycle type.

DR. KOBLER TO EDIT AMERICAN MEDICINE

Our readers will be interested to learn that the editorship of *American Medicine*, vacated several months ago by the death of the scholarly and well-loved Dr. Lewis, has now been filled by the appointment of Dr. E. Willis Kobler, of New York City.

We offer all good wishes for success and prosperity to our esteemed contemporary and its new editor.

EUROPEAN TOUR OF COLLEGE OF PHYSICAL THERAPY

The American College of Physical Therapy invites all physicians interested in that line of work to participate in a European tour which will include all the leading centers of physical therapy abroad.

The group will sail from New York, May 26, 1928, visit Paris, Leysin (Rollier's Clinic), Zurich, Vienna, Berlin, Copenhagen and London, sailing for New York June 30.

Membership in the group calls for a fee of \$937, from New York, back to New

York, which includes practically all expenses, afloat and ashore.

Those who are interested in this splendid opportunity to combine recreation with valuable instruction should write to The American College of Physical Therapy (Travel Dept.), Suite 656, 25 Broadway, New York City, for full particulars.

DAWNLAND MATERNITY INN, INC.

The Health Messenger, of Seattle, Wash., reports that the secret method of painless childbirth, announced by Dr. Harry T. Cook, of Los Angeles, which is to be practiced at "Dawnland," is nothing more than spinal anesthesia, which has been proved to be so dangerous as to be impracticable for this purpose.

Efforts are being made to secure investors in this "Maternity Inn," but those who think of putting their money into such a proposition should investigate most thoroughly before doing so.

RHEUMATISM REPORTABLE

Acute rheumatic fever has been made a reportable disease by the Iowa State Department of Health. The Iowa Heart Association is working with the State department to secure the cooperation of physicians in reporting the disease.

PHYSICIAN SEEKING LOCATION IN MICHIGAN

If any of our readers know of a small town in the southern or central part of Michigan where a physician could advantageously locate for general practice they will confer a favor by sending full information to Dr. Hugh H. Angle, 3511 Whittier Blvd., Los Angeles, Calif.

BASIC SCIENCE ACT WORKS

Since the passage of a Basic Science Act in the State of Washington, the graduates of regular medical schools are successfully passing the examinations, and a fair percentage of osteopaths are also passing. Chiropractors, sanipractors and other ir-

regulars are conspicuous by their absence, and the flow of these "healers" to Washington seems to be checked.



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THE DISCOVERER OF SANOCRY SIN

The discovery, about two years ago, by Prof. Holger Møllgaard, that Sanocrysin, a preparation of gold-sodium thiosulphate, has a profound effect upon tuberculosis caused much discussion. It is now believed that the doses first recommended were too large, and, with smaller quantities, more satisfactory results are now being obtained.

WESTERN ASSOCIATION OF PHYSICAL THERAPY

The next session of the Western Association of Physical Therapy will be held at Kansas City, Mo., April 20 and 21, 1928.

This meeting will be preceded by the tenth annual session of the Western School of Physical Therapy, held April 16 to 19.

Dr. Chas. W. Fassett, 115 East 31st St., Kansas City, Mo., will send full particulars to those who are interested.

DR. DE VRIES BECOMES A BRIGADIER GENERAL

As a reward for his success in reorganizing the 302nd Medical Regiment and bringing it to a high state of efficiency, Col. Joseph C. De Vries, Med. Res., of Brooklyn, N. Y., has been appointed to command Hospital Center No. 6, with the rank of Brigadier General.

The officers of the regiment tendered Col. De Vries a farewell dinner, on Dec. 6,

1927, at the Fraunces Tavern, New York City (where Washington bade his officers goodbye in 1783), at which were present Col. Traub, Chief of Staff 77th Division, Col. A. E. Truby, M.C., Corps Area Surgeon, and a number of other prominent Army officers.

UNITED STATES CIVIL SERVICE EXAMINATIONS

The United States Civil Service Commission announces the following open competitive examinations:

Assistant Medical Officer

Associate Medical Officer

Medical Officer

Senior Medical Officer

Applications for these positions will be rated as received by the Civil Service Commission at Washington, D. C., until June 29, 1928.

There are vacancies in practically all branches of medicine and surgery, but there is especial need for medical officers qualified in tuberculosis or neuropsychiatry.

Graduate Nurse

Graduate Nurse (Visiting Duty)

Graduate Nurse (Junior Grade)

Applications for these positions will be rated as received by the Civil Service Commission at Washington, D. C., until June 30, 1928.

Dietitian

Applications for dietitian will be rated as received by the Civil Service Commission at Washington, D. C., until June 29, 1928.

Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

Full information may be obtained from the United States Civil Service Commission at Washington, D. C.

DISTRIBUTION OF TULAREMIA

The U. S. Public Health Service reports that tularemia has now been observed in 36 of the United States, the District of Columbia and Japan.

Send for This Literature

To assist doctors in obtaining current literature published by manufacturers of equipment, pharmaceuticals, physicians' supplies, foods, etc., CLINICAL MEDICINE AND SURGERY, North Chicago, Ill., will gladly forward requests for such catalogues, booklets, reprints, etc., as are listed from month to month in this department. Some of the material now available in printed form is shown below, each piece being given a key number. For convenience in ordering, our

readers may use these numbers and simply send requests to this magazine. Our aim is to recommend only current literature which meets the standards of this paper as to reliability and adaptability for physicians' use.

Both the literature listed below and the service are free. In addition to this, we will gladly furnish such other information as you may desire regarding additional equipment or medical supplies. Make use of this department.

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| <p>B- 1 Helping the Cell to Help Itself. 32-page booklet by The Alkalol Co.</p> <p>B- 2 Your Prestige and Profit. 8-page booklet. The Carroll Dunham Smith Pharmacal Co.</p> <p>B- 3 Storm Binder and Abdominal Supporter. 4-page folder by Dr. Katherine L. Storm.</p> <p>B- 4 Pluto Water. Its Medicinal Values. 16-page booklet. French Lick Springs Hotel Co.</p> <p>B- 5 Ethical Medicinal Specialties, 8-page booklet. A. H. Robins Co.</p> <p>B- 6 The Journal of Organotherapy. 95-page booklet published monthly. G. W. Carnrick Company.</p> <p>B- 7 The Cure of Cystitis, Pyelitis and other Inflammatory Conditions of the Urinary Tract. Chicago Pharmacal Co.</p> <p>B- 8 The Dangers of Curettage. Huston Bros. Company.</p> <p>B- 9 Hang This Up—It Tells How to Make Percentage Solutions. Sharp and Dohme.</p> <p>B-10 Twentieth Century Health Builders. Burdick Corporation.</p> <p>B-11 The Role of Irradiation in Focal Infection and Obstructive Deafness by Ira O. Denman, M.D., F.A.C.S., Toledo, Ohio. Hanovia Chem. & Mfg. Co.</p> <p>B-12 The Bloodless Phlebotomist, Vol. VI, No. III. The Denver Chem. Mfg. Co.</p> <p>B-13 Endocrines and Hormones. Huston Brothers.</p> | <p>B-14 The New Ultra-Violet Therapy. McIntosh Electrical Corporation.</p> <p>B-15 Atophan—Rheumatism, Gout, Neuritis, Sciatica, Neuralgia. Schering & Glatz, Inc.</p> <p>B-16 Service Suggestions, January-February, 1928. Victor X-Ray Corporation.</p> <p>B-17 An Index of Treatment. Burnham Soluble Iodine Co.</p> <p>B-18 Taka-Diastase—Digestant of Carbohydrate Foods. Parke, Davis & Company.</p> <p>B-19 Hyperacid Conditions, Their Relief and Correction, Alka-Zane. Wm. R. Warner & Company.</p> <p>B-20 A Survey of Focal Infection. Fellows Medical Mfg. Co.</p> <p>B-21 Eye Symptoms in General Diseases. Battle & Company.</p> <p>B-22 Catalog of Dr. Scholl's Foot Comfort. Appliances and Remedies. The Scholl Mfg. Co.</p> <p>B-24 German Resorts. German Health Resort.</p> <p>B-25 Program Medical Lectures in Bad Kissingen. German Health Resorts.</p> <p>B-26 NEW SUGGESTIONS: X-Ray Technic with Petrolagar as Suspending Agent for the Opaque Meal, with reprint from the <i>Medical Journal and Record</i> for May 4, 1927, entitled "A Suggested Modification in the Technic of X-Ray Examinations of the Gastrointestinal Tract" by Dr. J. F. Montague, F.A.C.S. Deshell Laboratories, Inc.</p> |
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- B-80 The Quartz Lamp, Dec. 15, 1927. Hanovia Chemical Mfg. Co.